



**GET THE LEAD OUT :
THE GREATER SYRACUSE
LEAD POISONING PREVENTION
ACTION PLAN**

2018

ACKNOWLEDGMENTS

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Home HeadQuarters, the administrator for the Green & Healthy Homes Initiative (GHHI) of Greater Syracuse, guided the coordination of the Lead Poisoning Prevention Action Plan with support from management and staff. The plan would not have been possible without the commitment and participation of every person and organization involved with GHHI Greater Syracuse, particularly the GHHI Greater Syracuse Learning Network. The Learning Network acted as the steering committee for this action plan, guiding its focus, its outcomes and future successes.

The organizations that attended the GHHI Greater Syracuse Learning Network meetings are included below (in alphabetical order):

Alliance of Communities Transforming Syracuse
Central New York Community Foundation
CNY Fair Housing
Circare
City of Syracuse, Neighborhood and Business Development
The Gifford Foundation
Greater Syracuse Property Development Corporation
Green & Healthy Homes Initiative
Health Foundation of Western and Central New York
Home HeadQuarters
Legal Services of Central New York
Literacy Coalition of Onondaga County
Maxwell School of Citizenship & Public Affairs, Department of Geography and Maxwell X Lab
New York State, Homes and Community Renewal
New York State, Office of the Attorney General
Northeast Hawley Development Association
Onondaga County, Community Development Division
Onondaga County, Health Department
PEACE, Inc.
Syracuse United Neighbors
Uplift Syracuse
Upstate Golisano Children's Hospital, Central/Eastern New York Lead Poisoning Resource Center

A special thanks to the community members who attended the public meeting in the spring of 2017. A list of attendees is included in the appendix.

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EXECUTIVE SUMMARY

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Lead poisoning is a significant national, statewide and local public health concern. Once used widely in gasoline and paint, lead is an environmental toxin with the potential to harm an individual's growth, behavior and ability to learn. Children under the age of six and pregnant women are particularly vulnerable to lead poisoning.

With a vast housing stock built before the 1978 federal ban on residential lead paint, lead poisoning is a pervasive challenge for the Greater Syracuse community. Compounded by poverty, maintaining lead-safe housing is often taxing and cost-prohibitive for homeowners, landlords and renters.

In 2017, Home HeadQuarters' Green & Healthy Homes Initiative (GHHI) of Greater Syracuse and its partners facilitated a series of meetings to develop a prioritized approach to prevent lead poisoning. This action plan synthesizes those conversations into four focus areas - Policy and Enforcement, the Built Environment, the Health and Medical Field, and Community Awareness, Education and Outreach - each containing a series of strategies and action items.

The vision is to decrease lead hazards in the built environment and decrease the number of children with elevated blood lead levels in the Greater Syracuse community. This is an ambitious, but ultimately attainable goal.

The Lead Poisoning Prevention Action Plan captures a point in time. It represents specific policies, leadership, organizations, resources, data and activities. While these factors may change, GHHI Greater Syracuse and its partners maintain committed to preventing lead poisoning. This document will be regularly updated to guide future planning, programs and decision-making. The use of primary prevention strategies will remain the highest priority to effectively reduce and eliminate exposure to lead hazards.

Lead poisoning is preventable. Across the nation, communities are taking a stance against the unjust and unnecessary poisoning of children by lead. GHHI Greater Syracuse and its partners present this action plan to formalize their commitment to prevent lead poisoning in the Greater Syracuse community. Underlying all activities and driving our success, is an obligation to protect families and to help them thrive in the knowledge that they live in safe and, ultimately, healthy homes.

CHILDHOOD BLOOD LEAD LEVELS

NO SAFE BLOOD LEAD LEVEL CDC 2012



11,795 CHILDREN TESTED FOR LEAD POISONING

742 CHILDREN WITH $\geq 5\text{mcg/dL}$ EBLL (ELEVATED BLOOD LEAD LEVELS) ONONDAGA COUNTY 2016
ONONDAGA COUNTY HEALTH DEPT.

13203 13204 13205 13207 13208 HIGH RISK ZIP CODES
NYS HEALTH DEPT.

1,019 CHILDREN TESTED FOR LEAD POISONING

257 CHILDREN WITH BLOOD LEAD LEVELS $\geq 5\text{mcg/dL}$

82 CHILDREN WITH BLOOD LEAD LEVELS $> 10\text{mcg/dL}$
CITY OF SYRACUSE NRSA 2016
ONONDAGA COUNTY HEALTH DEPT.

CHILDREN LIVING IN POVERTY

ONONDAGA COUNTY SYRACUSE



1 IN 5 1 IN 2
ACS 2015 5-YR EST

HAZARDOUS HOMES



90.9%

OCCUPIED UNITS BUILT BEFORE 1980
CITY OF SYRACUSE
ACS 2015 5-YR EST

*1978 - FEDERAL BAN ON LEAD PAINT

EDUCATION

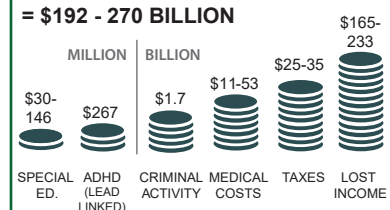


86 STUDENTS DROP OUT IN THE 9TH GRADE IN ASSOCIATION WITH LEAD POISONING

CITY OF SYRACUSE
LANE ET. AL 2011

LEAD POISONING ECONOMIC & SOCIAL COSTS

= \$192 - 270 BILLION



LEAD HAZARD CONTROL COSTS
= \$1.2 - 11 BILLION

RETURN ON INVESTMENT
= \$17 - 221
FOR EVERY DOLLAR SPENT

GOULD 2009

GET THE LEAD OUT: THE GREATER SYRACUSE LEAD POISONING PREVENTION ACTION PLAN

VISION, FOCUS AREAS, STRATEGIES & ACTION ITEMS



VISION DECREASE LEAD HAZARDS IN THE BUILT ENVIRONMENT & DECREASE THE NUMBER OF CHILDREN WITH ELEVATED BLOOD LEAD LEVELS IN THE GREATER SYRACUSE AREA.

POLICY & ENFORCEMENT

| CODES | RENTAL REGISTRY | SHARING DATA | SANITARY CODE | LEGISLATION | COALITIONS |
|--|---|---|---|--|---|
| <ul style="list-style-type: none"> Create and develop Bureau of Administrative Adjudication Increase codes compliance Increase efficiencies at division of Code Enforcement and housing court | <ul style="list-style-type: none"> Update SYR prop. Conservation Code (SPCC) Create proactive codes system Train code enf. professionals Consider lead ordinance Require stabilizing paint for new tenants | <ul style="list-style-type: none"> Identify what and who: share and update data Identify data needed to improve enforcement Identify where to store data Review shared data regularly | <ul style="list-style-type: none"> Review and recommend improvements to the Onondaga County Sanitary Code Review other NYS sanitary codes | <ul style="list-style-type: none"> Ensure and improve enforcement of prevention laws Engage health and medical field to improve lead testing Discuss improvements to HUD/EPA lead disclosure rule | <ul style="list-style-type: none"> Work with state coalitions Support current lead prevention legislation Identify future agendas and legislation Engage national organizations |

THE BUILT ENVIRONMENT

| LEAD SAFE FUNDING | RRP RULE IN NYS | RENTERS' RIGHTS | CROSS PROGRAM COORDINATION | EMPOWER PUBLIC |
|---|--|---|--|---|
| <ul style="list-style-type: none"> Identify and apply for lead funding for landlords and property owners Identify and promote the development of affordable, safe and healthy housing Create a database for lead safe units Build new homes | <ul style="list-style-type: none"> Identify how to enforce RRP rule in NYS with partners Provide training to contractors and employees Identify funding for landlords and property managers to receive RRP training | <ul style="list-style-type: none"> Identify resources for renters on rights and how to maintain a lead safe home Identify strategies to increase compliance with HUD/EPA lead disclosure rule Engage lawyers and judges on tenant rights | <ul style="list-style-type: none"> Identify where coordination is needed Create a working group to coordinate services Create an MOU for coordination of services and resources | <ul style="list-style-type: none"> Apply for funding for lead safety classes Identify and promote affordable EPA RRP training vendors Identify existing resources for lead prevention education Train and identify case workers |

HEALTH AND MEDICAL FIELD

| SOCIAL DETERMINANTS OF HEALTH | STATE FUNDED LEAD RESOURCES* | INVOLVE HEALTH INSURANCE COMPANIES | MEDICAID & PRIMARY PREVENTION FUNDING |
|---|--|---|--|
| <ul style="list-style-type: none"> Increase public health professionals' involvement in codes Identify items for collaboration on programs, resources and funding Facilitate communication between health and housing entities to strengthen strategies to reduce lead poisoning | <ul style="list-style-type: none"> Continue to engage with Upstate Medical University and Onondaga County Health Department Collaborate on the built environment Provide research and data on lead poisoning and primary prevention Discuss primary prevention activities for pregnant women | <ul style="list-style-type: none"> Engage medical insurance companies to participate with primary prevention Research grant opportunities for medical insurance companies Research and explore social impact bonds for lead poisoning prevention | <ul style="list-style-type: none"> Research current Medicaid programs that provide primary prevention funding Identify and engage NYS and partners to assist with Medicaid involvement in primary prevention |

*CENTRAL/EASTERN NY REGIONAL LEAD POISONING RESOURCE CENTER & ONONDAGA COUNTY LEAD POISONING CONTROL PROGRAM

COMMUNITY AWARENESS, EDUCATION & OUTREACH

| VULNERABLE POPULATIONS | SOCIAL & ENV JUSTICE | SAFE WORK PRACTICES | EARLY CHILDHOOD PROGRAMS |
|---|--|---|--|
| <ul style="list-style-type: none"> Targeted outreach questions: Available resources Outreach goals Targeted audience Audience access Primary message Outreach results Measurements | <ul style="list-style-type: none"> Engage environmental justice organizations in primary prevention Target neighborhoods with a high EBLL prevalence rate Engage partners to educate, advocate and inform residents of lead hazards | <ul style="list-style-type: none"> Identify at risk workers Identify RRP training opportunities Educate workers on cleaning techniques post-exposure to lead hazards | <ul style="list-style-type: none"> Educate school personnel, families and students Develop school district procedures for children with EBLL Encourage NYS to grant schools access to blood lead levels Refer children to medical provider and /or housing resources |

For more information, please refer to the Greater Syracuse Lead Poisoning Prevention Action Plan in its entirety.

INTRODUCTION

1

For centuries, first with the advent of the Erie Canal, then the railroads and now the interstate routes of I-90 and I-81, the City of Syracuse has functioned as a crossroad for the Central New York region. Located next to Onondaga Lake, Syracuse gained the nickname “the Salt City” for its abundant salty brine springs. As the largest metropolitan area in Central New York and the fifth most populous city in the State of New York, Syracuse is home to many businesses and is recognized as an economic and educational hub of the region.

Although having an abundance of historical and cultural heritage, the City of Syracuse and the Greater Syracuse communities face significant challenges, including a declining and aging housing infrastructure. Mirroring national concerns, environmental hazards, especially in the home, continue to inflict considerable and long-lasting impacts on properties in the area. Lead hazards, for instance, are a ubiquitous reality in the City of Syracuse where more than 90% of the housing stock was constructed before the federal 1978 lead regulations. Despite dramatic improvements over the past few decades, lead poisoning continues to be a serious threat especially for children under the age of six and pregnant women.

Home Headquarters’ Green & Healthy Homes Initiative (GHHI) of Greater Syracuse and its partners formalized efforts to address lead poisoning by creating a Lead Poisoning Prevention Action Plan. The vision of the action plan is to decrease lead hazards in the built environment and decrease the number of children with elevated blood lead levels in the Greater Syracuse area. Home Headquarters (HHQ), Inc., a non-profit community housing development organization and certified Community Development Financial Institution (CDFI), leads the administration of GHHI Greater Syracuse.

For over 20 years, HHQ has addressed declining homeownership rates throughout Central New York by facilitating first-time homebuyers, and supporting homeowners through home improvement grants and loans. HHQ is ranked nationally as a top producer in home repairs and facilitated homebuyers among NeighborWorks America affiliates.

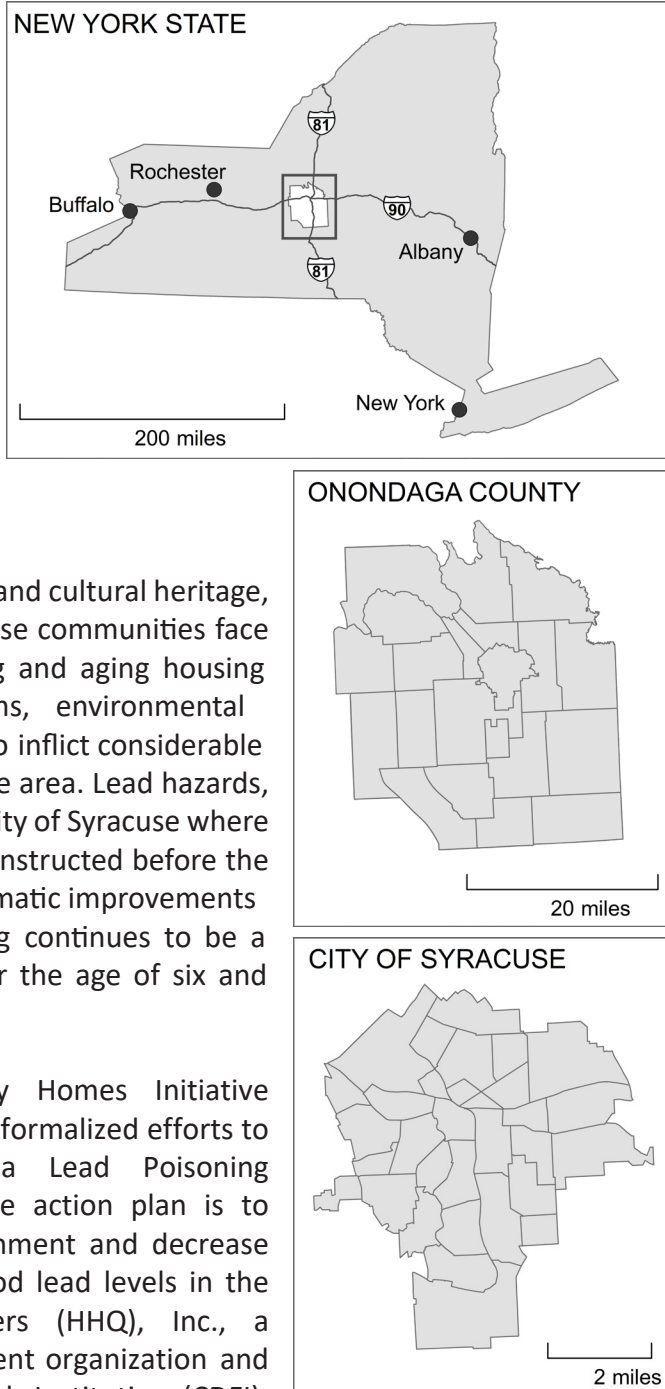


FIGURE 1

GHHI Greater Syracuse is an example of a broad community partnership working to comprehensively address the health, safety, energy efficiency and weatherization of homes. GHHI Greater Syracuse believes that a collective voice is required to achieve robust system change, address inequalities and advocate for a sustainable flow of funds to improve homes, the health of the occupants and strengthen agency alliances. To coordinate interagency activities, the initiative has a steering committee called the Learning Network. The GHHI Greater Syracuse Learning Network oversees the initiative's policies and procedures, and is responsible for identifying additional partners, developing the work plan and identifying future resources. The GHHI Greater Syracuse Learning Network acts as the steering committee for the Lead Poisoning Prevention Action Plan.

While GHHI Greater Syracuse is a local collaboration, it is recognized by the national Green & Healthy Homes Initiative® (GHHI®) which is dedicated to breaking the link between unhealthy housing and unhealthy residents. GHHI Greater Syracuse collaborates with the national GHHI non-profit to coordinate a national message concerning green and healthy homes and to further the integrated health, energy and housing model in Greater Syracuse.

OUTLINE OF LEAD POISONING PREVENTION ACTION PLAN

Beginning in January 2017 and continuing into the spring, the GHHI Greater Syracuse's Learning Network facilitated meetings to identify community partners and strategically focus on preventing exposure to lead hazards in the built environment. The meetings obtained community input to identify opportunities, build consensus on priorities and create strategies and actions items.

The Lead Poisoning Prevention Action Plan outlines a comprehensive approach to achieve the goals of decreasing lead hazards in the built environment and decreasing the number of children with elevated blood lead levels in the Greater Syracuse area. The plan begins with a review of the history of lead poisoning, the health effects, the social costs, the environmental justice concerns regarding lead exposure and the policies and legislation enacted to combat lead poisoning. The action plan then provides a demographic synopsis of Onondaga County and the City of Syracuse. Finally, the plan synthesizes suggestions from the GHHI Greater Syracuse community partners into strategies and actions designed to protect at risk populations, decrease the exposure to lead hazards and improve services through cross-program coordination. The plan uses four focus areas to prioritize strategies. The areas include: Policy and Enforcement; the Built Environment; the Health and Medical Field; and Community Awareness, Education and Outreach.

This document is designed to serve multiple audiences including local government, housing agencies, public health professionals, early childhood advocates, decision makers, health care providers, and other organizations or individuals committed to children, safe and healthy housing and lead prevention. While the plan outlines strategies and actions to improve services, cross-program coordination and the enforcement of regulations, ultimately primary prevention remains the highest priority to effectively reduce and eliminate exposure to lead hazards.

MEASURING THE LEAD POISONING PREVENTION ACTION PLAN

The process of developing an action plan can help stakeholders turn their visions into reality.

The Lead Poisoning Prevention Action Plan describes the steps that GHHI Greater Syracuse and its partners will take to meet community objectives. It also provides a guide to develop and utilize the group's strengths and services while also strategically identifying next steps. As with most formalized documents, the Lead Poisoning Prevention Action Plan is a point in time. Nevertheless, it should also be considered a dynamic document that will provide current and updated action items to guide future planning, programs and decision-making.

This is an ambitious document that requires coordination from multiple partners to successfully implement. To facilitate coordination, the Lead Poisoning Prevention Action Plan will measure its activities through the collective impact model (Kania and Kramer 2011). This model identifies five conditions to successfully achieve systematic change. The conditions include: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication and backbone support organizations.

COLLECTIVE IMPACT: THE CONDITIONS FOR SYSTEMATIC CHANGE

COMMON AGENDA
CONTINUOUS COMMUNICATION
BACKBONE SUPPORT
ORGANIZATION
SHARED MEASUREMENT SYSTEM
MUTUALLY REINFORCING
ACTIVITIES



FIGURE 2

The collective impact's **common agenda** requires participants to have a shared vision for change in a subject manner. The participants must have a common understanding of the subject manner and a joint approach with a common ground. The common ground must bring together organizations, corporations, governments, community groups and local citizens to establish workable cross-sector initiatives.

To measure the impact of a project the collective impact model must have a **shared measurements system**. Participants must agree on a how the project is measured and reported. A shared measurement system enables the participants to learn from each other's successes and failures and hold each other accountable.

Collective impact coordination needs to create **mutually reinforcing activities** and unite efforts to coordinate interventions and activities. Collective impact encourages participants to undertake activities at which excels and support coordinated activities that impact the project. Participants will not all do the same thing, but reinforce their role and reinforce the collective impact agenda.

Through collective impact, **continuous communication**, trust and regular meetings build recognized common motivation to creating change for a subject. Continuous communication builds experience with the participants and reinforces the common motivation behind their efforts for a common agenda.

For a collective impact model to work, an organization with staff will need to serve as the **backbone support organization** for the initiative. The backbone support requires dedicated staff and a specific set of skills to plan, manage and support the initiative through ongoing project management, technology, facilitation, and communications support for the initiative to function smoothly.

The Lead Poisoning Prevention Action Plan will utilize the Collective Impact Model Assessment Survey (see appendix) to measure the success of the plan and actions taken by the GHHI Greater Syracuse and its partners. This will include regularly evaluating the effectiveness of plan implementation.

Lead poisoning is entirely preventable and primary prevention is the most effective way to prevent the neurodevelopment and behavioral abnormalities associated with lead exposure (CDC 2015). As Katrina Korfmacher notes, lead is a “health problem with a feasible housing solution” (2008). Preventing lead poisoning, rather than treating the symptoms, requires control of the most significant cause of lead poisoning—lead based paint in housing units built before the 1978 federal ban (Gould 2009). It requires an investment in infrastructure as well as health.

HISTORY

After more than four decades of effort to both identify the primary sources of lead and screen children, lead poisoning prevention is often characterized as a public health success story (CDC 2015; McClure, Niles, and Kaufman 2016). Lead, a blue-grey malleable heavy metal found naturally in soil, was commonly used in a variety of products such as gasoline, food cans, ceramics, toys, water mains and household paint. However, after lead was linked to a variety of health concerns, rather than a convenient metal additive, lead became known as an environmental toxin—a naturally occurring or man-made substance with the potential to disrupt biological systems and harm health. In 1976, attempting to reduce lead exposure, leaded gasoline, a major contributor to soil and air contamination, was banned. In 1978, the federal government further banned the use of lead in residential paint. Accompanying these laws, the threshold of exposure deemed safe dropped from 60 µg/dL (micrograms of lead per deciliter of blood) in the mid-1960s, to 30 µg/dL in 1978, to 10 µg/dL in 1991 (Griffith, Doyle and Wheeler 1998). The results of blood testing reveal that the average blood lead level dropped by 90% from 1980 to 2010 (McClure, Niles and Kaufman 2016).

Despite dramatic improvements over the past few decades, lead poisoning continues to be a serious hazard for many children and pregnant women. Deteriorating lead paint, for instance, is often ingested by young children due to its sweet taste. Inhaling dust, caused by the friction of lead paint in surfaces such as windows and doors, is also a key source of lead exposure. In 2012, the Center for Disease Control (CDC) Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) determined that there is no safe blood lead level (McClure, Niles and Kaufman 2016). Instead, the CDC recommends blood lead levels of concern. Using a reference value of 5 µg/dL, the CDC identified 450,000 at risk children in the United States (McClure, Niles and Kaufman 2016). Consequently, although there has been a dramatic decline not only in the level of lead exposure deemed safe, but also the number of children suffering from lead poisoning, even small levels of exposure to lead have significant and long-lasting impacts.

HEALTH EFFECTS & EDUCATIONAL ATTAINMENT

Lead poisoning has considerable and well documented health effects. Mistaken by the body as calcium, lead accumulation can affect several aspects of the brain’s learning systems including: overall intellectual ability, speech and language, hearing, visual-spatial skills, attention, executive functions, social behavior and fine and gross motor skills (CDC 2015). Reduced visual-motor skills can harm a child’s coordination and neuromuscular skills needed for the successful completion of academic activities associated with reading and mathematics. Additionally, reduced visual-

spatial skills may discourage children from participating in sports and other physical activities that often help to build social skills (CDC 2015). In terms of behavior, lead poisoning can cause problems such as impulsivity, aggression and a short attention span. One study found that children with blood lead levels greater than 2.0 µg/dL were four times more likely to have a physician diagnosis of Attention Deficit/Hyperactivity Disorder (ADHD) and be on stimulant medication in comparison to children with blood lead levels below 0.8 µg/dL. ADHD is defined as inattentive and/or hyperactive/impulsivity symptoms occurring before age 12 years (CDC 2015).

Of course, the effects of lead do not occur in isolation and often have a cumulative impact on a child's life. For instance, lead exposure is directly associated with serious impairments in academic success and is a key risk factor associated with both school absenteeism and the school dropout rate (CDC 2015). One finding suggests that for children with elevated blood lead levels (10 mcg/dl or greater) every 1 mcg/dl of blood lead decreases their school attendance by 0.131 years (Lane et al. 2011). In the Syracuse City School District, this statistic translates to an estimated 9th grade dropout rate of 86 students per year (Lane et al. 2011). Early education interventions for children with developmental delays are the most effective method to counter the impact of lead on academic performance (CDC 2015). However, without early intervention, the cumulative effects of lead often result in the need for special education services. Thus, not only are lead poisoned children less likely to be considered school ready, but there is also a seven-fold increase in their likeliness to fail to graduate high school (CDC 2015). Transitioning to the work place, adults who are poisoned as children, suffer further consequences due to a lack of necessary skills. Nationally, it is estimated that lead poisoning accounts for \$165–\$233 billion in lost earning potential (Gould 2009).

BEHAVIOR

Criminal behavior, violence, teenage pregnancies and tobacco use have also been associated with lead poisoning. Ecological studies have substantiated the link between crime and lead through an analysis of the impact of the Environmental Protection Agency's (EPA) Clean Air Act. Studying the correlation between leaded gasoline sales and atmospheric lead, researchers suggested that the Clean Air Act accounts for one-third of the reduced crime rate in the 1990s. In Syracuse, the synergy between lead poisoning and crime is evident in communities that suffer trauma from "prolonged and intense" neighborhood violence (Lane et al. 2017). In other words, the communities with the highest incidents of gunshots and murders are also the most at risk for lead poisoning (Lane et al. 2017).

Traditionally excluded from discussions of gun violence, "delinquency" and more broadly violent crime, are women. However, women experience similar, if not the same, effects of lead poisoning on impulse control, aggression and executive function. Therefore, attempting to navigate traditional barriers, researchers analyzed the relationship between lead poisoning, repeat teen pregnancy and tobacco use (Lane et al. 2008). Their findings suggest that although there are other factors influencing teen sexual and social behavior, young women with a history of lead poisoning are more likely to have multiple pregnancies and to smoke cigarettes than female teens without a history of lead exposure (Lane et al. 2008). More precisely, 38% of repeat teen pregnancies in Syracuse are attributable to lead poisoning; the estimated Medicaid bill for those pregnancies is \$106,129 per year (Lane et al. 2008).

ADULT EXPOSURE

Additionally, while exposure to lead often occurs during childhood, adult exposure can also have severe consequences. For example, exposure during pregnancy can result in adverse fetal development and growth. For workers within industries such as construction, lead paint removal, demolition, the maintenance of structures such as bridges, auto repair and battery manufacturing, lead exposure is a serious occupational hazard. OSHA, or the Department of Labor's Occupational Safety and Health Administration, estimates that 804,000 general industry workers and 838,000 construction workers are exposed to lead. Some estimates even suggest that more than 80% of elevated blood lead levels in adults are due to workplace exposures (Spivey 2007).

For adults, lead exposure and the accumulation and eventual mobilization of lead from bone can cause increased blood pressure, hypertension, memory or cognitive loss and reduced kidney function (Spivey 2007). Because of these concerns, workplace safety standards are regulated. For example, the EPA's Renovation, Repair and Painting Rule (RRP) promotes lead-safe work practices through training requirements and enforcement mechanisms for renovations that disturb lead paint (Korfmacher and Hanley 2013). OSHA has additional safety standards by industry and caution workers to not take lead contaminated dust home on clothes, skin and hands.

LONG TERM SOCIAL COSTS

Investing in lead hazard control and remediation is often cited as economical, especially when considering the long term social and medical costs of lead poisoning. In her widely cited article "Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control", Elise Gould outlines a series of costs associated with lead hazard control and lead poisoning (2009). She estimates that the social costs of lead poisoning include: medical treatment (\$11–\$53 billion), lost earnings (\$165–\$233 billion), tax revenue (\$25–\$35 billion), special education (\$30–\$146 million), lead-linked ADHD cases (\$267 million) and criminal activity (\$1.7 billion), for a total of \$192–\$270 billion. Alternatively, the cost of lead hazard control ranges from \$1.2 to \$11.0 billion. Therefore, for each dollar invested in lead hazard control there is a return of \$17–\$221.



FIGURE 3

ENVIRONMENTAL INJUSTICE

Despite the economic rationale, there continues to be a lack of adequate investment in lead remediation as well as a lack of enforceable laws and regulation. Subsequently, although some identify lead poisoning reduction as a public health success, it is also an example of environmental injustice. Lead poisoning is not contiguous—cases of elevated blood lead levels cluster in space and in specific neighborhoods. Most prominently, lead disproportionately poisons urban, poor and minority children (Griffith et al. 1998; Gould 2009). Accompanying segregated neighborhoods is economic devastation and poverty (Lane et al. 2008).

The City of Syracuse not only faces high rates of poverty, it also has the highest level of poverty

concentration among black and Hispanic populations for a metropolitan area in the United States (Jargowsky 2015).

For lead poisoning, a lower socioeconomic status is associated with several factors that may increase a child's susceptibility to lead and enhance its toxicity. For instance, inadequate iron and calcium intake from poor nutrition can increase lead absorption. Further factors include medical coverage, stress and exposure to other toxins such as pesticides (CDC 2015). As mentioned previously, lead poisoning can drastically reduce academic performance. For minority children, lead exposure in conjunction with other health disparities are estimated to account for nearly one-quarter of the racial gap in school readiness, the over-representation of minority children requiring special education, and the racial gap for graduation (Lane et al. 2011; CDC 2015).

Furthermore, with a legacy of low homeownership rates and deferred maintenance, disadvantaged neighborhoods may have high proportions of privately owned rental units and generally low housing values. Maintaining lead-safe units, or using lead certified contractors to repair lead hazardous conditions, is challenging and sometimes cost-prohibitive for property owners with both low rental revenues and a low housing value. Consequently, chipping, peeling paint and structural defects that result in substantial lead hazards may be more prevalent in privately owned low-income rental housing units built before the 1978 federal. These units pose the greatest risk, often to the most vulnerable populations (Korfmacher and Hanley 2013).

POLICIES

There are several federal, state and local policies and initiatives working to reduce lead exposure. At the federal level, the Department of Housing and Urban Development's (HUD) Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X), requires the disclosure of known lead hazards in properties built before 1978 prior to sale or lease. Although this Act has provided crucial information on hazards, it does not necessarily result in the effective remediation of lead required for primary prevention. The EPA's Renovation, Repair and Painting Rule (RRP) establishes contractor training requirements and lead safe work practices and standards for renovation work conducted for hire in pre-1978 properties.

In New York State, the state health law mandates the screening of children for lead poisoning at ages one and two and establishes the required follow-up care based on the child's test result (Control of Lead Poisoning, Section 206 (1)(n) and Title 10 of Article 13). NY State Health Department also periodically releases health data including an assessment for high risk zip codes. In 2016, in the wake of the Flint, Michigan crisis, Governor Andrew Cuomo further implemented lead testing throughout New York State school districts. For a comprehensive overview of federal, state and local laws see Table 1.

In contrast to the federal and state laws, primary prevention is a focus of local municipal agendas. Detroit, Michigan, for instance, sometimes called the "Cadillac of primary prevention models", requires owners of pre-1978 rental units to provide an annual "lead clearance report" (Korfmacher and Hanley 2013). The report must contain both a lead inspection report performed by a certified inspector or assessor and a lead assessment report by a certified risk assessor. This approach spares the city the staffing requirements, the expense and the logistics of performing routine

TABLE 1: POLICIES & LEGISLATION ON LEAD PREVENTION & PROTECTION

| Description | | Date | Summary |
|--------------------------|---|--------------------------|---|
| Federal Legislation | Leaded gasoline restrictions; Environmental Protection Agency (EPA); Clean Air Act | 1976 | Banned the use of lead in gasoline. |
| | Lead paint controls; Consumer Product Safety Commission 16 CFR 1303, Public Law 110-314 | 1978, amnd 2008 | Banned lead paint in residential properties and some commercial products such as toys and furniture. In 2008, the cap on lead content in paint was changed from 0.06% to 0.009%. |
| | Residential Lead-Based Paint Hazard Reduction Act of 1992; Title X; Housing and Urban Development (HUD) | 1992, amnd 2005 | Developed a national strategy to reduce lead-based paint hazards in housing to prevent childhood lead poisoning. Directs the EPA and HUD to regulate lead-based paint hazards. |
| | Lead-Based Paint Disclosure Rule; 24 CFR Part 35; Housing and Urban Development (HUD); implementing regulations 40 CFR Part 116 | 1996 | Requires the disclosure of known lead-based paint and hazards before the sale or lease of housing built before 1978. |
| | Renovation, Repair and Painting Rule (RRP); 40 CFR 745, subpart E; Environmental Protection Agency (EPA) | 2008, amnd 2010 and 2011 | Mandates work disturbing lead-based paint in homes, child care facilities and pre-schools built before 1978 to be completed by EPA certified renovators following lead-safe work practices. |
| | The Lead-Safe Housing Rule; 24 CFR 35, subparts B through R; HUD | 2004 | Federally owned units or housing receiving federal assistance must meet specified requirements for handling lead-based paint: <\$25,000 interim controls or abatement, >\$25,000 full abatement with certified contractor required. |
| | Home Lead Safety Tax Credit Act of 2016; S. 2573 | Proposed 2016 | A tax credit for up to 50% of the lead hazard reduction cost for eligible units—defined as built before 1978 with residents that have a cumulative adjusted gross income less than \$110,000. |
| | Lead Safe Housing for Kids Act of 2016; S.2631; EPA and HUD | Proposed 2016 | Directs the EPA and HUD to update standards for lead contaminated dust and soil such as changing the EBL standards to reflect the Center for Diseases Control (CDC) definition and requiring dust wipe inspections. |
| | Control of Lead Poisoning; NYS Public Health Law, section (1)(n) and Title 10 of Article 13 | 1993, amnd 2009 | Requires lead poisoning screening for children aged 1 and 2 with appropriate follow-up care. |
| | Water testing requirements; NYS state bill to amend Public Health Laws; S08158 | 2016 | Mandates regular testing of potable water sources for lead contamination in all NYS schools |
| State Public Health Laws | | | |

TABLE 1 CONTINUED: POLICIES & LEGISLATION ON LEAD PREVENTION & PROTECTION

| Description | | Date | Summary |
|--------------------------|--|-----------------------|--|
| State Public Health Laws | Granting schools access to a student's blood lead test results (A03899/S03941) | Proposed January 2017 | Introduced by Sen. Hannon and Rep. Morelle. An act to amend the public health law, in relation to granting schools access to a student's blood lead test results in the statewide immunization information system. The purpose of verifying immunization status for eligibility for admission and for the purpose of identifying individual student blood lead information for the provision of appropriate educational services. |
| | An act to amend the public health law, in relation to the definition of elevated blood lead levels (A06906) | Proposed May 2017 | Amends the definition of "elevated lead levels" set forth in subdivision 6 of § 1370 of the Public Health Law to lower the level of lead in whole blood requiring action under the NYSDOH Lead Poisoning Prevention Program from the current level of 10 micrograms of lead per deciliter of whole blood (pg/dL) to 5 pg/dL. |
| Local Enforcement | Code of Ordinances, City of Syracuse; Sec 27-77 Lead paint; Gen. Ord. No. 30-1993, 6-28-93; Sec. 27-132 Rental Registry; Gen. Ord. No. 16-2007, 5-7-07 | 1960, amnd 2018 | Supplements federal regulations by assessing visual chipping or peeling paint and assigning code violations or designating properties as unfit. The codes department and Onondaga County Health Department also share data on lead poisoning cases and code violation to enhance enforcement. Amended in 2018, the rental registry mandates property inspections, including voluntary interior inspections, every three years. These inspections create a further mechanism to monitor lead-based paint hazards. |
| | Sanitary Code; Lead Poisoning Control Program; Onondaga County | 1968 | The county Health Department provides nursing and environmental case management services for children with EBLL as well as working to address sources of lead paint in accordance with federal, state and local regulations. |
| | Municipal Violations Bureau, City of Syracuse | 2017 | Proposed administrative system that would ticket and fine code violations to alleviate judicial case load. |

TABLE 2: LOCAL ORDINANCE AND ENFORCEMENT

| Location | Date | Law | Summary |
|-------------------|------------------|---|--|
| Burlington, VT | 2009 | Burlington, VT Code of Ordinances, Ch. 18, Art. III, section 112 | Combination of monitoring mechanisms, inspections, enhanced disclosure requirements, lead safe work practices and state law framework of housing registration and Certificate of Occupancy requirements. |
| Chicago, IL | 2008 | Chicago Municipal Code 421-Chi 7-4 | Ordinance provides city with broad authority to enter and inspect. Supplements state law giving additional authority to conduct outreach and encourage tenants to request inspections. |
| Cincinnati, OH | 2005 | Cincinnati Code §00053-15(C) | Requires removal or covering of paint containing more than 0.5% lead. If confirmed as the source of lead poisoning, paint must be removed or made inaccessible to small children. |
| San Francisco, CA | 1992, 1996, 2004 | “Comprehensive Environmental Lead Poisoning Investigation, Management and Enforcement”; S.F. Health Code Art. 26), §§1601 et seq; and Article 11, §§580-596. S.F. Building Code Art. 36, §3407 et seq | City identifies “priority areas” for inspections, establishes designated funding of program through fines. |
| Youngstown, OH | 2005 | “Lead Hazard Court” Local enforcement of state law: ORC 3767.41 and title laws ORC 5301.252 | County Health Department uses Special Prosecutor to enforce state law provisions for EBL when owner fails to comply. Enhances federal disclosure law by attaching affidavits to deeds. |
| Utica, NY | 2009-10 | Rental Occupancy Permit Joint Inspection Agreement (non-statutory) | Rental Occupancy Permit requirements allow joint inspection by County Health Department, City Building and Fire Inspectors. It is not a law, but an agreement. |
| Erie County, NY | 1994, amnd 2010 | Erie County Sanitary Code, Article IX | Declares the conditions conducive to lead hazards a nuisance and obliges correction to meet habitability standards; outlines requirements for lead safe work practices. |
| State of Maine | 1993, amnd 2016 | Lead Poisoning Control Act (22 M.R.S. §§ 1320 & 1320A). | Inspections of units with EBL or known hazard; occupants can request inspections. Specifies violations as Class E crime and imposes per day per violation assessments |
| State of Michigan | 2016 | Michigan State Plan Amendment (SPA), Title XXI state-designed Health Services Initiative (HSI); Flint Michigan Section 1115 Demonstration | Allocates federal funds for abatement and lead hazard reduction activities for eligible Medicaid/Children’s Health Insurance Program (CHIP) children (<19) and pregnant women. |

EXAMPLES OF LOCAL, COUNTY AND STATE EFFORTS TO ADDRESS LEAD HAZARDS. (PARTIALLY EXTRACTED FROM KORFMACHER AND HANLEY 2013)

rental inspections. Additionally, through administrative enforcement rather than a judicial model, Detroit is not only able to enforce a larger case load, but the city also has the power to assess per day, per violation fines. As fees can mount quickly, the city has gained significant leverage over property owners (Korfmacher and Hanley 2013).

In contrast to Detroit, the city of Rochester, New York, has incorporated the regular inspection of rental units for lead into the previously conducted Certificate of Occupancy inspections. The city also uses county health department data to establish and periodically revise geographic areas of “high risk” within the city. Houses within these areas undergo more rigorous inspection protocols including dust wipes, based on the assumption of lead in pre-1978 units, if deteriorating paint is not visible. This heightened procedure reduces the costs of citywide inspections whilst also maintaining the needed protection in high risk areas (Korfmacher and Hanley 2013). For further examples please see Table 2.

The different approaches to local lead laws have provided several valuable insights. Rochester, for instance, demonstrates how resources and data can be successfully aligned to target areas that are typically underserved. Detroit’s preference for an administrative system rather than an overburdened judicial system is echoed in Syracuse where the city is moving forward with a Municipal Violations Bureau. Similarly to Detroit, the Municipal Violations Bureau will ticket and fine violations.

Alternatively, in Philadelphia, Pennsylvania where inspections and certification obligations are targeted to housing with children under six and pregnant women occupants, there are concerns surrounding fair housing (Korfmacher and Hanley 2015). Advocates are apprehensive that enhanced obligations are causing landlords to be more reluctant to rent to families with young children. Thus, it is recommended that cities should monitor for unintended negative effects of their selected strategy (Korfmacher and Hanley 2015). Cities should also continually monitor and enforce safe work practices. In Rochester, for example, blood lead levels were closely monitored to ensure that the new law did not result in unsafe renovation that would have in fact caused a spike in elevated blood lead levels (Korfmacher and Hanley 2015). It is also pertinent to note that while residential paint is justifiably a focus of many local laws as a strategy to ensure a child’s primary residence is lead safe, children continue to be poisoned in a variety of social settings ranging from daycares, to grandparents’ homes, to schools.

CONCLUSION

There are several strategic plans that outline actions to take at all levels of government to end lead poisoning. The Green & Healthy Homes Initiative, for example, has a Strategic Plan to End Childhood Lead Poisoning: A Blueprint for Action that comprehensively incorporates federal actions by agency, state and local government legislative bodies, as well as private sector and philanthropic investments (2016). The National Center for Healthy Housing and the National Safe and Healthy Housing Coalition produced a similar document, Find it, Fix it, Fund it: Lead Elimination Action Drive, that detailed federal policy, funding and infrastructure recommendations for the 2017 administration. Additional resources continued to be developed. However, common among most, is the need to comprehensively act to benefit the health, safety and economic opportunities of our local communities.

Affordable, quality and lead safe housing is a national concern. For such an extensive challenge, limited resources must be effectively managed and distributed. Data, such as demographic and health data, are often used to identify at risk populations to maximize impact and leverage resources. At the national level for instance, as shown in Figure 4, there are 134 million residential units. Using overlapping and interrelated data more precisely pinpoints both lead safe and unsafe housing. In other words, 134 million units is reduced to target 1.1 million priority lead hazardous and low income units occupied by children under six which correlated with many of the coinciding 535,000 specific lead poisoning cases. Therefore, although a national concern, understanding the scale of lead safe housing in a local context is vital for the effective use of resources.

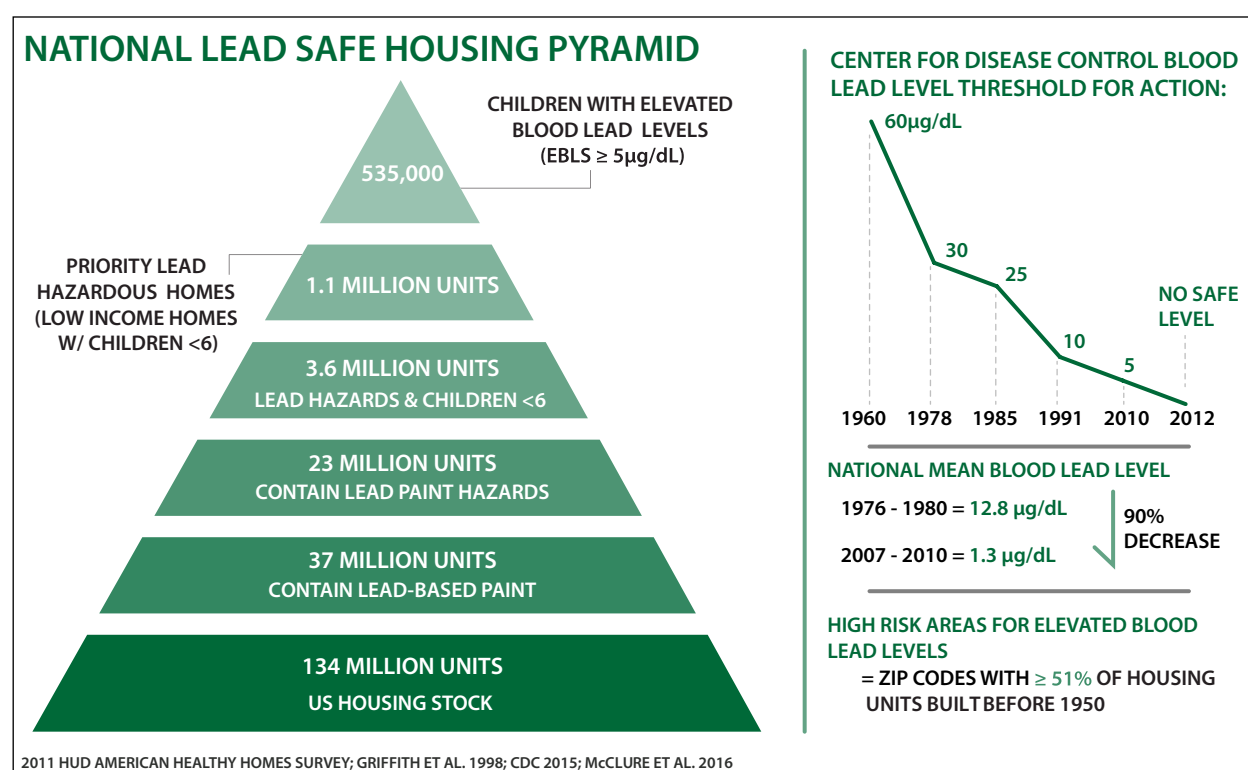


FIGURE 4

For that reason, the following section provides a snapshot of Onondaga County and the City of Syracuse.

POPULATION, RACE & ETHNICITY

Onondaga County has a population of 467,026 people. Children comprise 23% of the total population with 31.5% of children under the age of six (Census Bureau 2010). The City of Syracuse has a total population of 145,170 people. Children also account for 23% of the total city population with 37% of children, living in the city, under the age of six (ACS 2015 5 year estimates children). Figure 5 portrays the racial composition of the two populations. Particularly poignant is the distinction between the ratio of individuals that identified as either White or, Black or African American. For instance, in Onondaga County, 81.1% of the population self-identified as White

and 11% identified as Black or African American (Census Bureau 2010). For the City of Syracuse, 56% of the population identified as White and 29.5% as Black or African American. Additionally, within the city 8.3% of the population indicated Hispanic or Latino ancestry, particularly of Puerto Rican descent.

Further adding to the city's diversity are New Americans. Since the early 2000s, Syracuse has welcomed refugees through the local organizational efforts of Interfaith Works and Catholic Charities. Annually, Interfaith Works resettles around 500 to 600 refugees from countries such as Bosnia-Herzegovina, Sudan, Somalia, Burma, Bhutan and Iraq. Between 2001 and 2012, 7,210 refugees were directly resettled in Syracuse (Onondaga Citizens League 2013).

EDUCATION, EMPLOYMENT & INCOME

Education, employment and income are further demographic categories used to characterize populations. In Onondaga County, 9.8% of the county's population over the age of 25 have less than a high school education. Conversely, 19.8% of city residents over the age of 25 have less than a high school education (ACS 2015 5 year estimates). To increase educational attainment, the City of Syracuse School District supports a variety of programs designed to help students succeed. In 2016, for instance, with the assistance of increased vocational training certification, the school district successfully closed the racial achievement gap, meaning that black and white students graduated at the same rate (see Figure 6). Additional efforts to support education success include Say Yes to Education and Early Childhood Programs. Although more is still to be done, the school district is taking steps to tackle educational attainment standards.

Associated with living standards is employment and income. The county unemployment rate in 2015 for individuals over the age of 16 in the labor force was 4.6%. The same measurement in Syracuse was 6.4%. In terms of income, county households earned \$23,211 more than their city counterparts which average an annual household income of \$31,881. Supplemental income sources, such as food stamps and SNAP are used by 14.2% of county and 30.7% of city households. Cash public assistance aids 3.9% of county and 8.4% of city households. Additionally, 31.5% of county and 27.8% of city households receive Social Security Income (SSI) (ACS 2015 5 year estimates).

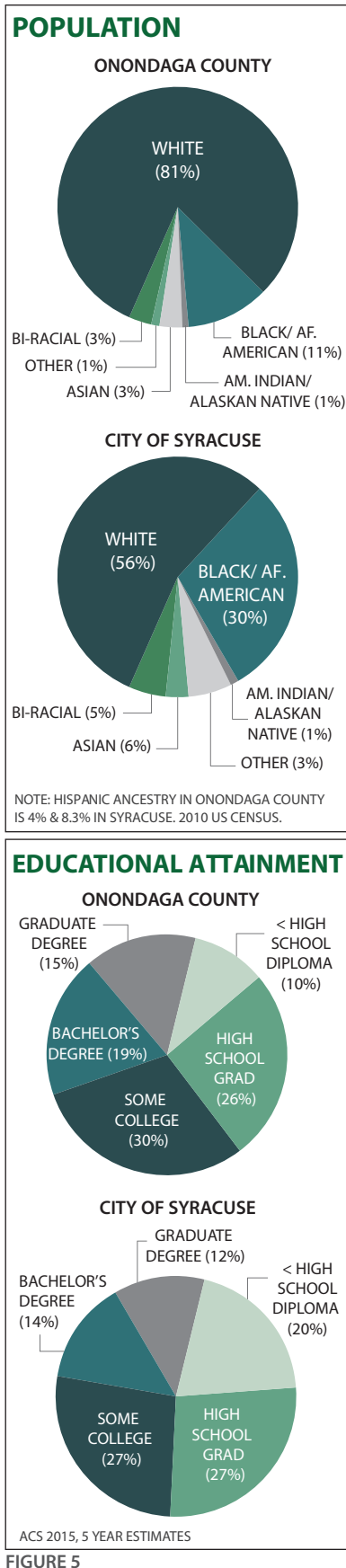


FIGURE 5

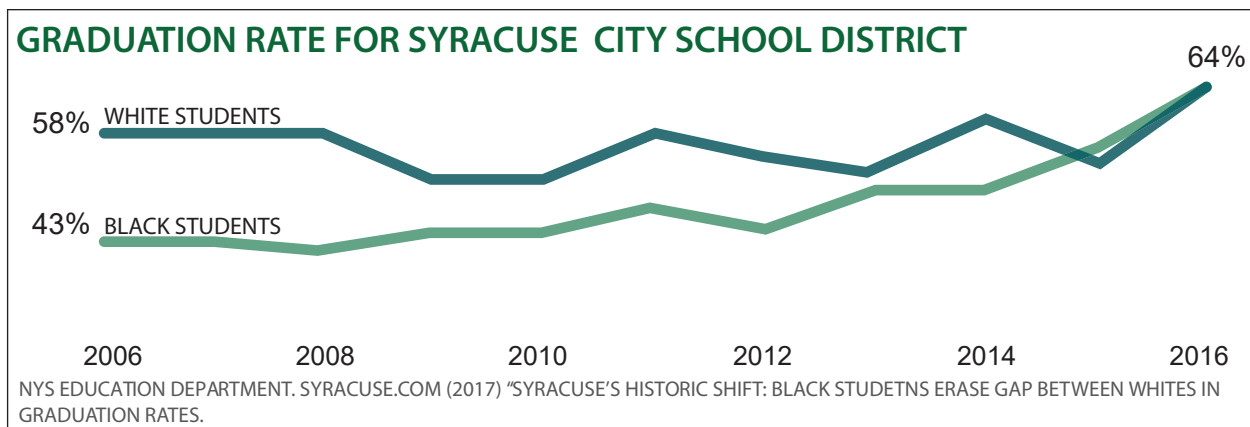


FIGURE 6

For many households, poverty remains a persistent concern. In 2015, 22.5% of all children in Onondaga County and 49.6% of all children in Syracuse lived in poverty. When considering the entire population, 15.4% of the county and 34.8% of city individuals lived below the poverty line in 2015 (ACS 2015 5 year estimates). Figure 7 portrays the spatial distribution of poverty within the county and city. Both the county and the city see a larger percentage of minority populations living in poverty. In Onondaga County, 10% of White, 37.5% of Black or African American, 26.7% of American Indian or Alaskan Native, 31% of Asian and 34% of Hispanic or Latino populations lived below the poverty line in 2015. In the city, 41.5% of Black or African American, 43.2% of American Indian or Alaskan Native, 49.9% of Asian and 49.1% of Hispanic or Latino populations lived below the poverty line in 2015. (For a full break down see table 3).

TABLE 3: POPULATION LIVING IN POVERTY

| Percent of population living below the 2015 poverty level | Onondaga County | City of Syracuse |
|---|-----------------|------------------|
| White | 10.6 | 26 |
| Black or African American | 37.5 | 41.5 |
| American Indian / Alaskan Native | 26.7 | 43.2 |
| Asian | 31 | 49.9 |
| Hispanic | 34 | 49.1 |

Female headed households, in contrast to joint partner households, experience higher rates of poverty. This is particularly evident for female headed households with children. In Onondaga County, 40.2% of female headed households with related children lived below the federal poverty line in 2015. This rate increases to 52.2% for female headed households with related children under the age of five only. In Syracuse, 54.5% of female headed households with related children and 56.7% of female headed households with related children under the age of five lived below the federal poverty line in 2015 (ACS 2015 5 year estimates).

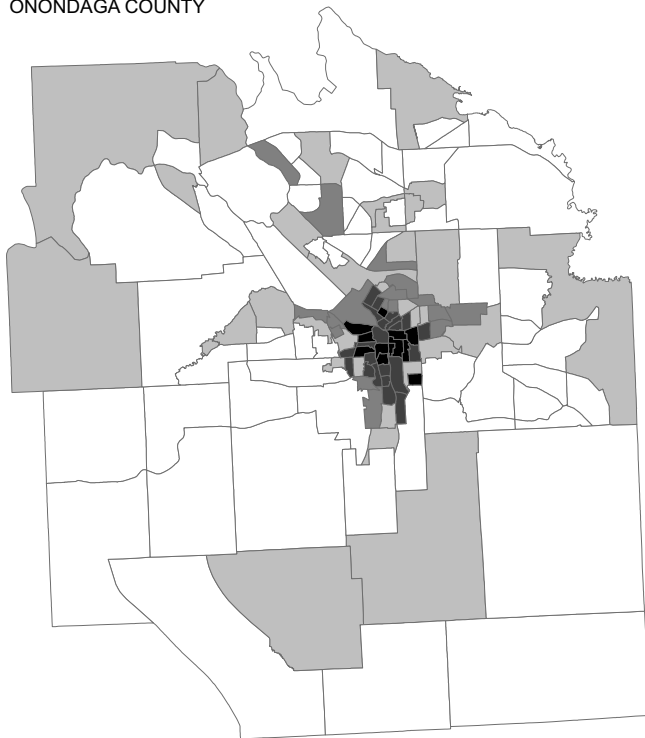
HOUSING INFRASTRUCTURE

A discussion of lead poisoning cannot be separated from the consideration of housing infrastructure. Onondaga County has a total of 202,357 residential units, 92.7% of which are occupied. Owner occupants comprise 64.7% of the housing market and thus, the renter population accounts for

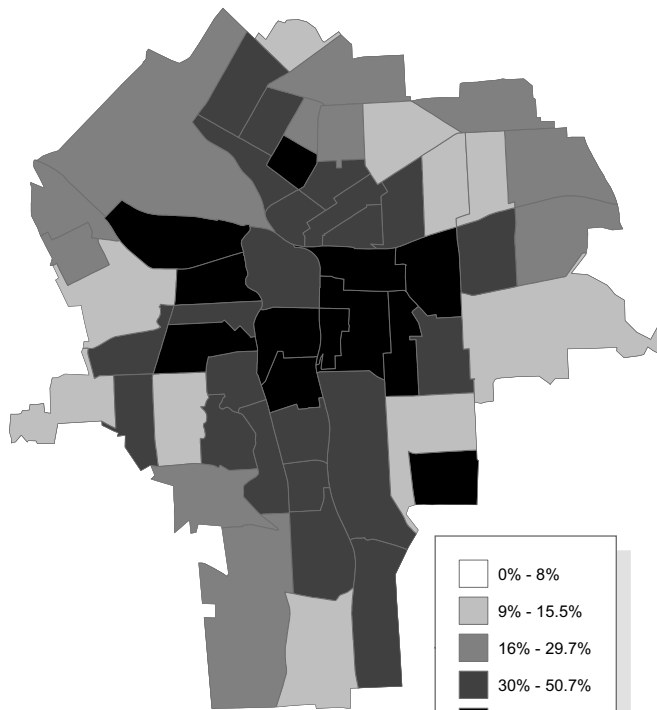
PERCENT OF PEOPLE LIVING BELOW THE FEDERAL POVERTY LEVEL, 2015

ONONDAGA COUNTY

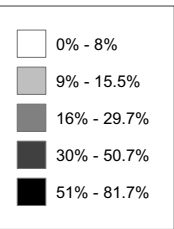
SYRACUSE



10 miles



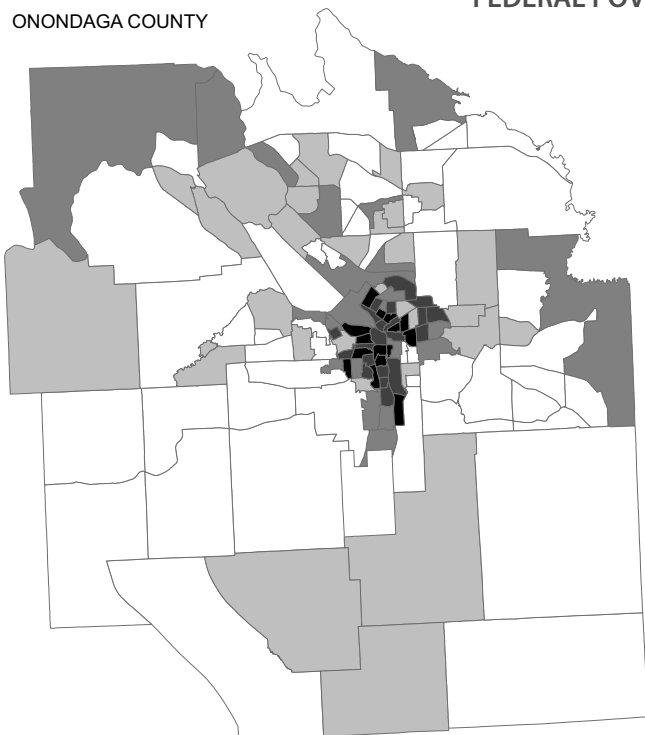
2 miles



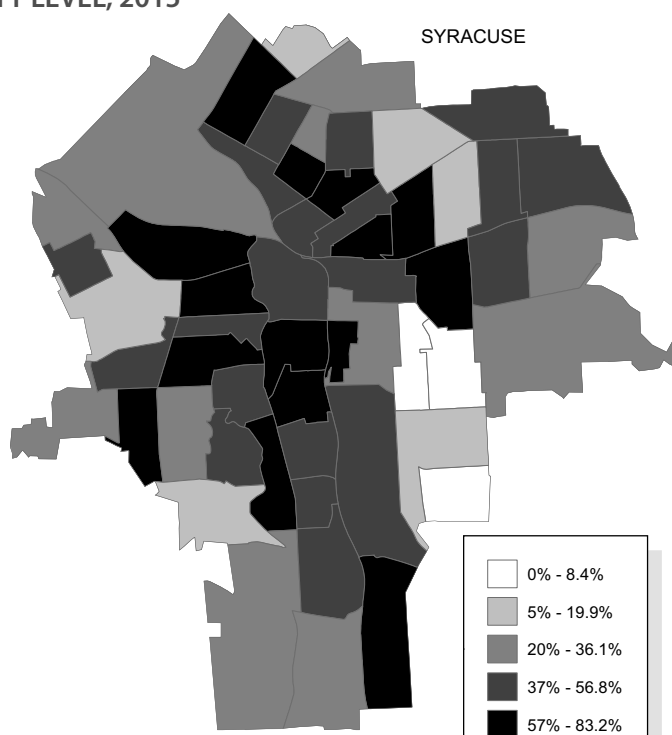
PERCENT OF CHILDREN LIVING BELOW THE FEDERAL POVERTY LEVEL, 2015

ONONDAGA COUNTY

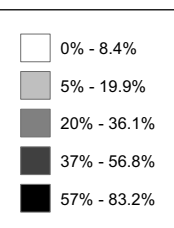
SYRACUSE



10 miles



2 miles



SOURCE: ACS 2015 5-YR ESTIMATES, CENSUS TRACTS
FIGURE 7

35.3%. The City of Syracuse has a total of 64,356 residential units, 81.1% are occupied. Owner occupants comprise 38.5% of Syracuse's occupied residential units. In contrast to the county, renters account for the majority (61.5%) of the housing market (ACS 2015 5 year estimates). Although there are several forms of residential buildings in the City of Syracuse, one and two family properties are a high priority for lead hazard reduction and/or remediation activities. Comprising a significant portion of the residential housing stock (see table 4), these properties may often contain more hazards than large scale apartment buildings that are strictly regulated.

Onondaga County and the City of Syracuse have a vast housing stock built before the 1978 federal ban on residential lead paint. Table 5 compares the age of infrastructure for the county and city. **In Syracuse, 90.9% of occupied units were built before 1980** (ACS 2015 5 year estimates). At 56.4%, owner occupied properties built in 1939 or earlier comprise Syracuse's largest inventory of housing. In contrast, the county, most probably due to suburban sprawl, has a smaller aging housing stock with only 74% of occupied units built before 1980. (See Figure 9 for the spatial distribution housing built before 1979 and 1949). Additionally, in 2016, residential buildings constructed before 1940 compromised approximately 80% of the Onondaga County Health Department's inspections.

TABLE 4: CITY OF SYRACUSE HOUSING STOCK

| Structure Type | Total | Percentage of total housing units |
|----------------|--------|-----------------------------------|
| 1-unit | 27,303 | 41.2 |
| 2-units | 13,664 | 21 |
| 3 - 4 units | 6,372 | 9.8 |
| 5 - 19 units | 7,640 | 11.7 |
| > 20 units | 9,742 | 15.0 |
| Mobile homes | 145 | 0.2 |

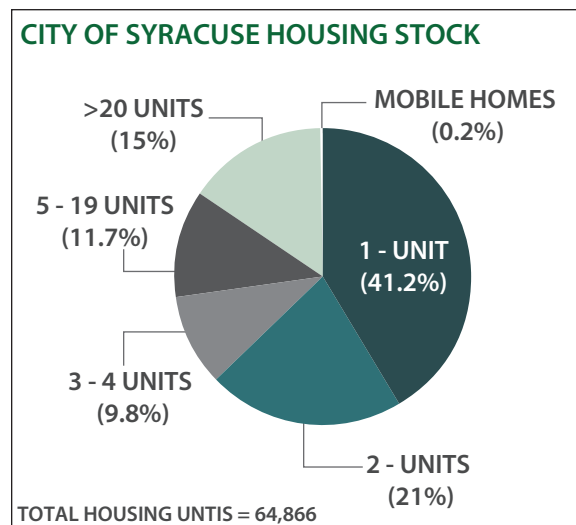
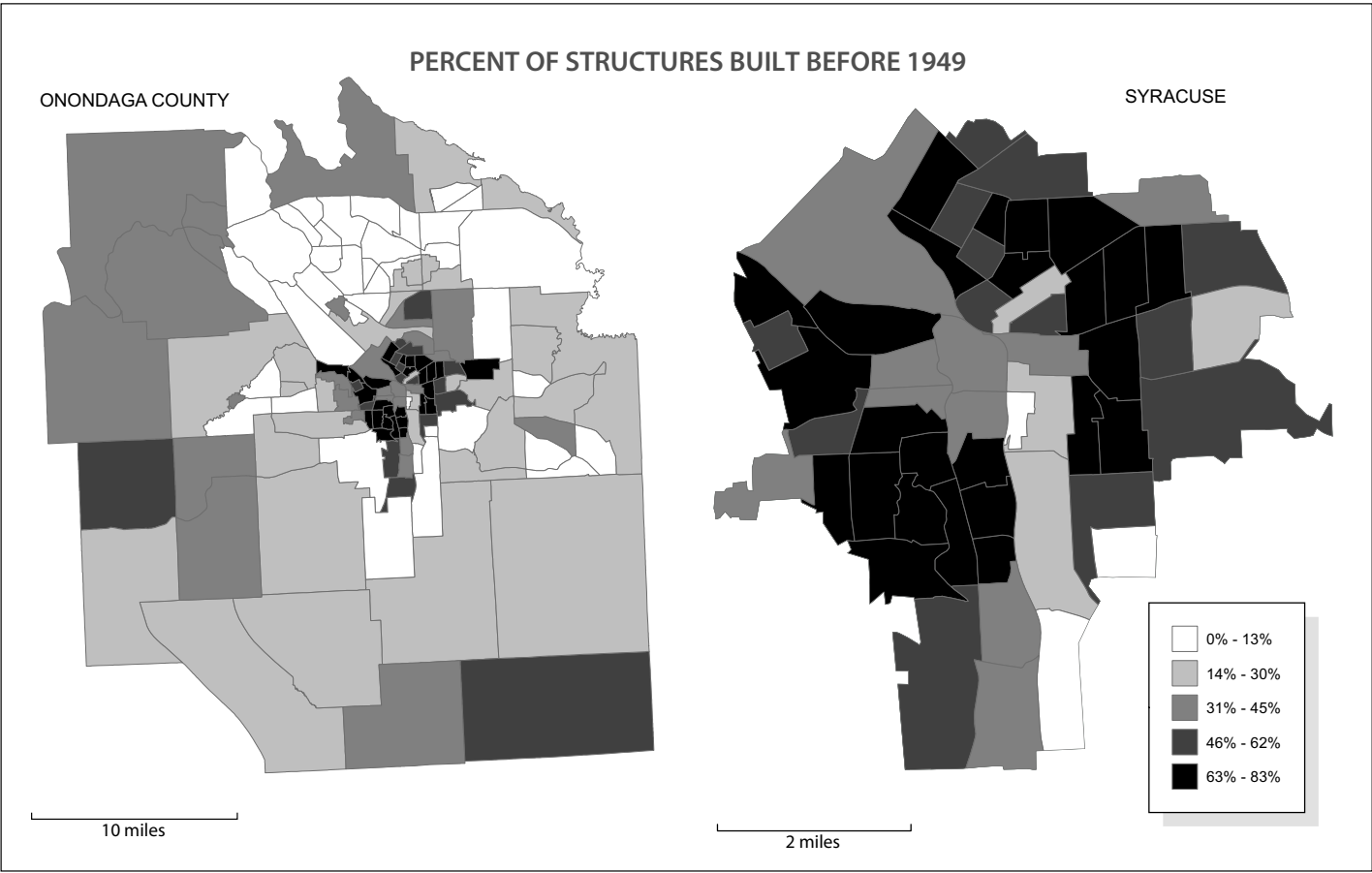
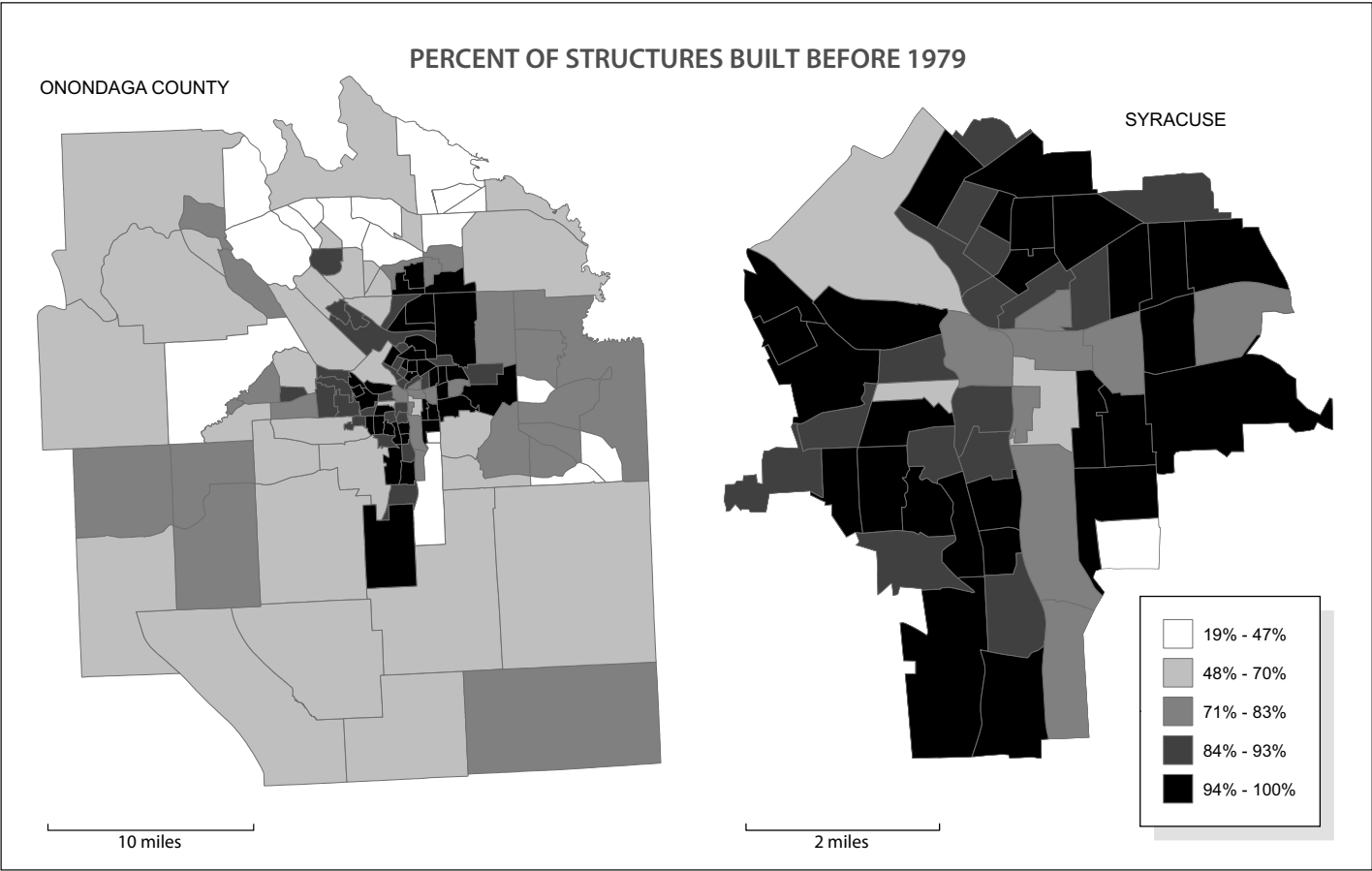


FIGURE 8

TABLE 5: AGE OF HOUSING INFRASTRUCTURE

| Year Built (% of total) | Onondaga County | | | City of Syracuse | | |
|----------------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------|
| | Occupied | Owner occupied | Rental occupied | Occupied | Owner occupied | Rental occupied |
| 2014 or later | 0 | 0 | 0.1 | 0 | 0 | 0.1 |
| 2010 to 2013 | 1 | 0.9 | 1.2 | 0.5 | 0.1 | 0.7 |
| 2000 to 2009 | 6.3 | 7.3 | 4.5 | 16 | 1.1 | 1.9 |
| 1980 to 1999 | 18.6 | 19.6 | 16.5 | 7.0 | 3.7 | 9.1 |
| 1960 to 1979 | 26.5 | 24.8 | 29.8 | 19.1 | 9.1 | 25.3 |
| 1940 to 1959 | 24.8 | 26.2 | 22.2 | 28.2 | 29.6 | 27.4 |
| 1939 or earlier | 22.7 | 21.2 | 25.7 | 43.6 | 56.4 | 35.6 |
| Total units | 184,641 | 120,529 | 64,112 | 54,781 | 21,127 | 33,654 |



SOURCE: ACS 2015 5-YR ESTIMATES, CENSUS TRACTS
FIGURE 9

CHILDHOOD BLOOD LEAD LEVELS

In addition to the census data, the results of childhood blood lead tests and the number identified with elevated blood lead levels (EBLLs) are a vital data source. Required by law, children are tested for EBLLs, first at age one and then at age two. More tests and further follow-up for lead poisoning are required for test results above the nationally established reference value of 5 mcg/dL. It is important to note that in 2012, the Center for Disease Control (CDC) changed the blood level reference value from 10 mcg/dL to 5 mcg/dL resulting in an increase in both the number of children needing follow-up services and the local prevalence rate. Although the exposure threshold decreased, the CDC maintains that no safe blood lead level in children has been identified (CDC 2015). In the City of Syracuse, the New York State Department of Health identified five zip codes considered at high risk lead poisoning based in their analysis of blood lead testing and housing data. These zip codes are 13203, 13204, 13205, 13207 and 13208.

The Onondaga County Health Department's (OCHD) Lead Poisoning Control Program (LPCP) monitors blood lead testing results for all Onondaga County children. Established in 1972, the program aims to reduce the prevalence of childhood lead poisoning by identifying and correcting housing hazards, such as lead based paint. The program also provides case management, environmental risk assessments, ongoing community outreach and public health education services. To see the required activities and case management services of the program please see the appendix. Annual housing data and EBLL analysis directs OCHD's primary and secondary prevention activities and guides its targeted community outreach and inspection activities in rental units within the City of Syracuse's highest risk neighborhoods. See figure 10 for the spatial distribution of EBLLs and high risk zip codes identified by the Onondaga County Health Department for the City of Syracuse (Syracuse.com).

TABLE 6: ONONDAGA COUNTY HEALTH DEPARTMENT ANNUAL BLOOD LEAD LEVEL DATA

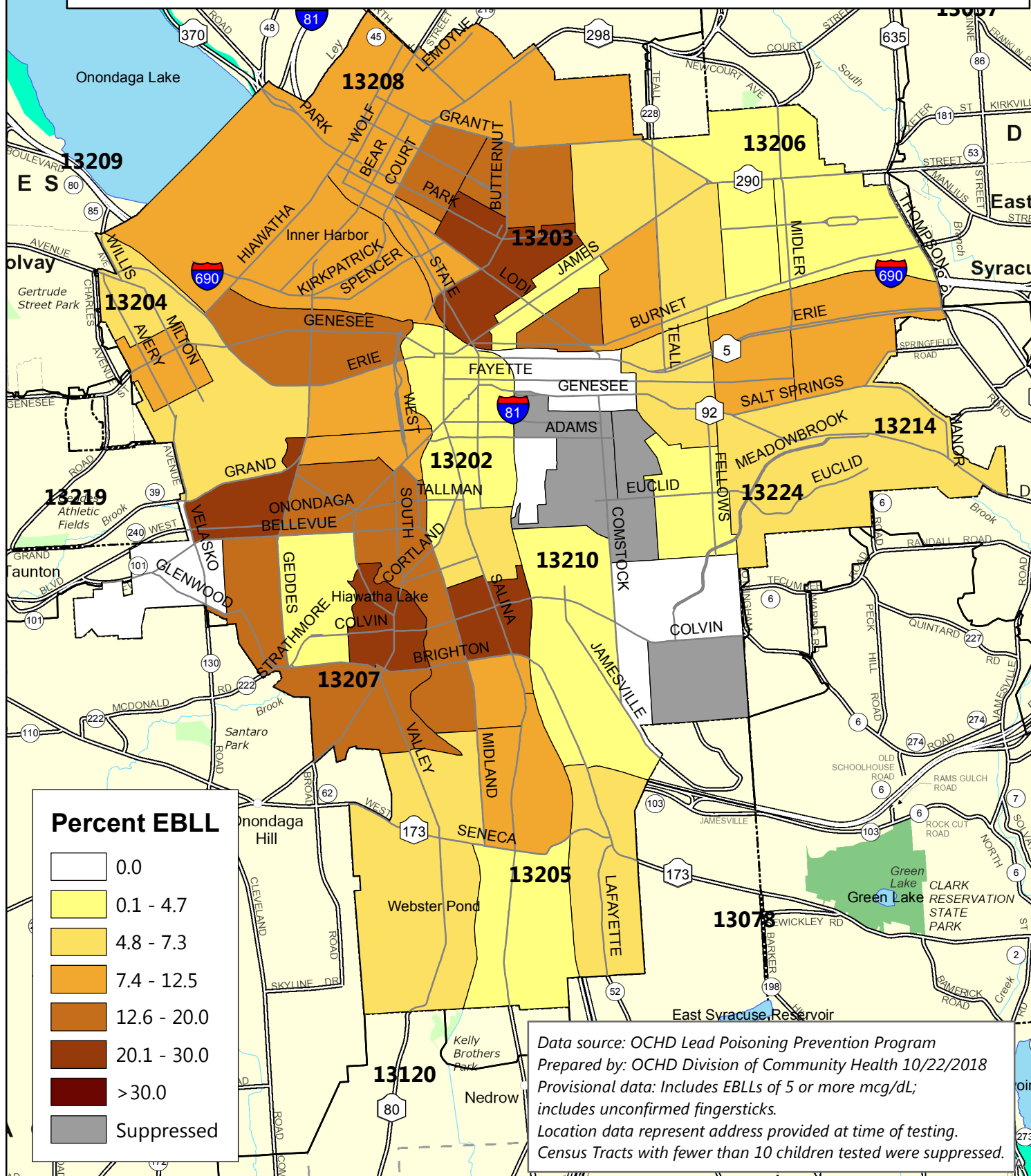
| Annual lead data | 2014 | 2015 | 2016 |
|--|--------------|--------------|-------------|
| Primary prevention inspections | 282 | 315 | 265 |
| BLL ≥15 mcg/dL inspections | 69 | 76 | 71 |
| Section 8 referral inspections (Program began July 2016) | N/A | N/A | 24 |
| Children tested for lead poisoning in Onondaga County | 11,338 | 11,519 | 11,795 |
| Children with BLL ≥5 mcg/dL in Onondaga County | 722 | 707 | 742 |
| Number/ Percentage of OCHD tests done at WIC | 984 / 84.2% | 952 / 78.7% | 893 / 73.6% |
| Children tested at WIC with BLL ≥5 mcg/dL in Onondaga County | 113 / 13.52% | 108 / 11.02% | 94 / 10.5% |

ANNUAL REPORT 2016

Percent of Children with Elevated Blood Lead Levels of 5 or more mcg/dL by Census Tract

Syracuse, New York

January 1, 2017 - December 31, 2017



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MEETINGS

In 2013, community stakeholders embraced a collaborative approach to address healthy housing by pursuing a national designation for the Green & Healthy Homes Initiative (GHHI). The resultant GHHI Greater Syracuse program, an initiative of Home HeadQuarters, engaged members of the community to develop a shared vision and align efforts to effectively create a housing model where health, housing and energy sectors were brought together to support an integrated platform. As a result of this process and to advance current policy efforts, GHHI Greater Syracuse and its partners identified preventing exposure to lead based paint hazards as one of its strategic priorities. To act comprehensively and to ensure that the Lead Poisoning Prevention Action Plan is truly a collaborative product that reflects innovative strategies and action fitted to the Greater Syracuse community's concerns, GHHI Greater Syracuse, guided by a Learning Network and Home HeadQuarters, actively engaged community stakeholder participation and coordination.

Subsequently, GHHI Greater Syracuse held a series of meetings with stakeholders. The meetings focused on three primary objectives: to build understanding on lead prevention in the Greater Syracuse area; provide opportunities for public engagement and community input; and identify clear strategies and actions for implementation. The meetings enabled stakeholders to openly discuss their concerns, values, aspirations and priorities for lead poisoning prevention strategies and actions.

More specifically, the initial meeting engaged the GHHI Greater Syracuse Learning Network partners to define areas of consensus on lead poisoning prevention priorities. To set the context for discussion, the meeting began with a presentation of data trends. Participants were then asked to discuss and build consensus on strengths, weaknesses and vision for the future. The following meeting obtained input from community partners on lead prevention and again built consensus on priorities for strategies and actions. Engaged in a lively community stakeholder discussion were organizations, initiatives and people active in fields ranging from lead prevention, to early childhood health, to educational attainment.

PARTICIPATION & INVOLVEMENT

Discussions with diverse partners resulted in the identification of four focus areas: Policy and Enforcement; the Built Environment; the Health and Medical Field; and Community Awareness, Education and Outreach.

At the core of the focus areas, driving the outcomes of the plan, are partners that directly act to prevent lead poisoning and reduce or remediate lead hazards. A primary goal of GHHI Greater Syracuse is to inform, educate and support the development of housing improvements that will comprehensively address Syracuse's housing stock in a manner that protects the health and safety of the residents, improves energy efficiency and decreases housing costs. GHHI Greater Syracuse and its partners are strategically focusing on preventing exposure to lead hazards in the built environment and are exploring opportunities to scale-up resources to meet the need for lead hazard reduction funding in the most at risk communities.

The City of Syracuse and Onondaga County, have a variety of departments, programs and resources that work to identify lead based paint hazards, children at risk for lead poisoning and enforce compliance with the correction and remediation of identified lead-based paint hazards. Recently, two departments have worked to share data on open lead violations and cases of lead poisoning to more directly target remediation efforts. In addition, the NYS Department of Health and the US Department of Housing and Urban Development (HUD) provide valuable funding to these agencies through grants such as the NYSDOH Lead Poisoning Prevention Program; the Childhood Lead Poisoning Prevention Program; and HUD's Lead-Based Paint Hazard Control and Lead Hazard Reduction Grant Programs. Beyond public entities, there are also various private stakeholders directly involved with these actions. Private partners may include landlords or property owners, lead risk assessors, EPA certified environmental health laboratories, housing and health agencies, community development corporations and contractors.

In addition to direct involvement, there are several related initiatives that can act to support the primary prevention of lead poisoning. As mentioned previously, the relationship between lead poisoning and poverty is profound (see for example Griffith et al. 1998; Gould 2009; Korfmacher and Hanley 2013; Lane et al. 2017). However, the Lead Poisoning Prevention Action Plan cannot directly act to systematically alter poverty. The activities of the Greater Syracuse HOPE (Healing, Opportunity, Prosperity and Empowerment) anti-poverty initiative may work more effectively to impact the conditions of poverty and, in turn, address strategies to prevent of lead poisoning. Access to housing, healthcare, education, and employment are additional examples of related activities.

Synergies, or the ability to leverage success through cooperation with related organizations, also exist for each focus area. In the Greater Syracuse area, there are several organizations, initiatives and companies that have related goals, strategies and represent similar populations to those identified in this action plan. As lead poisoning most prominently affects developing children, organizations that serve the interests of children, such as the Onondaga County Literacy Coalition, the Early Childhood Alliance, School Districts, Head Start programs, Daycare providers and the Department of Social Services are examples of entities with shared goals. Additionally, because Syracuse has a relatively diverse population, organizations that work directly with community members can provide services, such as translators or legal services, to assist with the effectiveness of outreach, education and support for the process of lead remediation. These organizations can also help to build trust with the populations that they serve.

Finally, on the periphery of this action plan, are informed and ready participants that provide valuable support when necessary. Passing amendments or new legislation requires diverse support from a broad spectrum of actors. Examples may include politicians, religious institutions, neighborhood organizations, community centers, local businesses, tenant rights advocates, responsible rental property owners and health organizations. One group of the most valuable participants are community members—their support places pressure on institutions and community leaders to act. Community engagement and the collaboration and coordination of partners in all sectors of the community are vital to the success and collective impact of preventing lead poisoning in the Greater Syracuse community.

This section lays out detailed strategies and actions for Home Headquarters' GHHI Greater Syracuse and its partners. It is designed to set an agenda to both address lead hazards in the built environment and achieve a sustainable primary prevention system. The synthesized prioritized strategies and action items direct positive change as it pertains to each of the four focus areas.

POLICY & ENFORCEMENT

There are several laws already in place to decrease the level of lead in the environment (see Table 1). Lacking enforcement capacity and investment, these laws are not always implemented to their original intent. However, effectively enforcing existing laws is equally important as adopting new primary prevention policies and recommendations.

Below are prioritized strategies to decrease the level of lead in the environment, with a focus on enforcement.

STRATEGY: EFFICIENCIES FOR CODE VIOLATIONS THROUGH THE MUNICIPAL CODES BUREAU

ACTION ITEMS

- Create & Develop a Bureau of Administrative Adjudication
- Increase compliance with property owners
- Increase efficiencies at the City's Division of Code Enforcement and Housing Court

Housing codes can require owners of properties to remediate deteriorated painted surfaces and address structural defects that cause paint to chip, flake or peel. The enforcement of code violations currently solely relies on an over-burdened housing court. Creating a Municipal Code Violations Bureau will create an administrative, rather than judicial, process to expedite satisfying outstanding housing code violations by non-compliant property owners. This Bureau would increase efficiencies and revenues and decrease the current court case load at housing court. Thus, City attorneys would be able to dedicate time and resources to more serious violations. In 2017, the City of Syracuse Common Council approved legislation to create the Bureau of Administrative Adjudication.

The Bureau also hopes to improve the working relationship between property owners and the Division of Code Enforcement. Currently, code enforcement employees are responsible for building plan reviews and the inspections of construction projects within the City of Syracuse. It also serves to educate residents and business owners on how to maintain property values, preserve a high quality of life, and protect the integrity of the community. The new Bureau will provide the opportunity for the City of Syracuse to cooperatively work with property owners to address citations before going through the court system.

STRATEGY: RENTAL REGISTRY IMPROVEMENTS

Every one-family and/or two-family rented or leased dwelling unit within the City of Syracuse requires a Rental Registry Certificate. To gain the certificate, the property must pass an exterior inspection conducted by employees of the Division of Code Enforcement. The inspection allows code enforcement officers to identify exterior chipping and peeling paint. However, without tenant or owner approval, code enforcement staff may not go inside the unit.

Several municipalities passed Property Conservation Codes to enhance the rental registration process and its enforcement capabilities. Rochester, NY, for example, passed a property conservation code in 2005 to achieve this goal (Chapter 90, Property Conversation Codes). These ordinances help prevent exposure to lead based paint hazards that can poison residents. In 2018, the City of Syracuse updated its rental registry.

This action item is two-fold. First, the City should pass an ordinance that allows code enforcement officers an enhanced ability to identify and cite additional health and safety violations, such as deteriorating paint, during routine inspections, of both the interior and exterior of rental units. Secondly, the City of Syracuse must create a proactive approach to code enforcement that allows property owners time to implement these new measures.

ACTION ITEMS

- Update Syracuse Property Conservation Code (SPCC)
- Create a proactive approach to code violations
- Train Code enforcement professionals
- Increase compliance with property owners
- Consider creating a Lead Ordinance
- Consider requiring landlords to stabilize paint in units for new tenants

Updates to the Syracuse Property Conservation Code (SPCC) would impact approximately 18,000 occupied rental units. Syracuse has 54,781 occupied housing units; 61% or 33,654 are rental units; 9,861 buildings are one- and two family rental structures (ACS 2015 5 year estimates).

STRATEGY: SHARING DATA FOR ENFORCEMENT

ACTION ITEMS

- Identify organizations and agencies that can share information
- Identify what information is needed to improve enforcement
- Identify where this information should be stored and what organization or agency should continue to update the information.
- Review the shared data on a regular basis

Several organizations, government agencies and case managers are actively engaged with populations exposed to lead hazards and thus most susceptible to lead poisoning. The information that these agencies collect is often buried in databases that help only a single organization. Although unintentional and often a circumstance of multi-layered programs, services and resources, this nevertheless creates siloed programs and structures.

The City of Syracuse Department of Neighborhood and Business Development and the Onondaga County Health Department recently began to break down silos and share data. Now, the Onondaga County Health Department enters non-compliant property owners into a city database for code violations. This shared information provides a critical compliance history for property owners. To protect occupant privacy, the data focuses purely on the property and not the residents of the property. While lead hazards and uncompliant code violations are linked within the database, continual improvements must be made as more data resources are identified.

STRATEGY: SANITARY CODE IMPROVEMENTS

Pursuant to Public Health Law of the State of New York, a sanitary code establishes the necessary provisions of administration and enforcement to protect, preserve and promote the health and

social well-being of people in all public and private structures. Directed by the Commissioner of Health, or any person authorized by the Commissioner of Health, a sanitary code permits access to the entire structure for the purposes of inspection. Lead hazards can be included in the sanitary code.

Onondaga County's Sanitary Code provides an opportunity to prevent lead poisoning by ensuring that the housing stock quality is adequate for the public's health. This action item is to review the current Onondaga County sanitary code, review other county sanitary codes and identify ways in which the Onondaga County sanitary code can assist with the prevention of lead poisoning.

ACTION ITEMS

- Review the Onondaga County Sanitary Code
- Review other NYS Sanitary Codes
- Recommend any improvements to the Onondaga County Sanitary Code

STRATEGY: IMPLEMENTATION OF LEAD POISONING PREVENTION LAWS

ACTION ITEMS

- Ensure future laws and legislation can be implemented and enforced
- Improve enforcement of current laws and legislation
- Engage the medical and health field, daycares, school districts and Head Start programs to assist with the implementation and testing of children ages one and two
- Discuss ways to improve the HUD/EPA Lead-Based Paint Disclosure Rule

GHHI Greater Syracuse and partners would like to readdress and evaluate the ability to enforce pertinent laws and regulations. Currently, there are several federal, state and local laws that aim to assist with lead poisoning prevention and reducing exposure to lead. In New York State, for example, the Control of Lead Poisoning; NYS Public Health Law, (section (1)(n) and Title 10 of Article 13), requires children aged 1 and 2 to not only be screened for lead poisoning, but to also receive the appropriate follow-up care. Onondaga ranks the 2nd highest out of 62 counties in the state for the percent of children tested (59.7%) twice before their third birthday. Even with our local success, there is a lack of statewide enforcement and children go without lead poisoning screening.

Thus, laws are only successful when implemented to their original extent. To ensure success, research must be conducted to validate the ability to achieve the intent of the law or regulation. Additionally, a process or procedure must be established to follow through with requirements for implementation. These action items are designed to consider the implementation and enforcement of laws and legislation

CASE EXAMPLE

2016 SUCCESSFUL AMENDMENT TO NYS PUBLIC HEALTH LAW

Governor Andrew Cuomo enacted amendment that required all school districts to test drinking water for lead contamination. The amendment mandates a required action by a specific date.

STRATEGY: REGIONAL, STATE & NATIONAL LEAD PREVENTION COALITIONS & ORGANIZATIONS

Through Home HeadQuarters' GHHI Greater Syracuse program, partners have collaborated to create a Lead Poisoning Prevention Action Plan. At the same time, other regional communities are also working to achieve similar goals. Buffalo, for instance, through a GHHI site, is creating a Lead Poisoning Prevention Action Plan. In 2000, Rochester established the Coalition to Prevent Lead Poisoning and developed an action plan in 2007.

The Community Foundation of Herkimer & Oneida Counties, Inc. launched an initiative aimed at eliminating childhood lead poisoning in Herkimer and Oneida counties by 2030. In addition to NYS regional lead prevention efforts, the national GHHI site and other national organizations are engaging the federal government through education, advocacy and engagement.

These action items listed to the right identify an interest to collaborate on policy and enforcement initiatives with other local, regional, state, and national organizations. With other active lead prevention coalitions throughout the state, ongoing communication and collaboration is necessary to identify a state focus.

ACTION ITEMS

- Work with lead prevention coalitions throughout the state
- Support current lead prevention legislation
- Identify future lead prevention agendas and legislation
- Engage national organizations with the local and statewide agenda and legislation

THE BUILT ENVIRONMENT

Exposure to lead hazards may happen at work, school, home, or any place a person visits regularly. In addition to physical structures, environmental toxins that are exposed to air or water are key sources of lead. For instance, the friction of lead paint in surfaces such as windows and doors may result in the inhalation of lead contaminated dust.

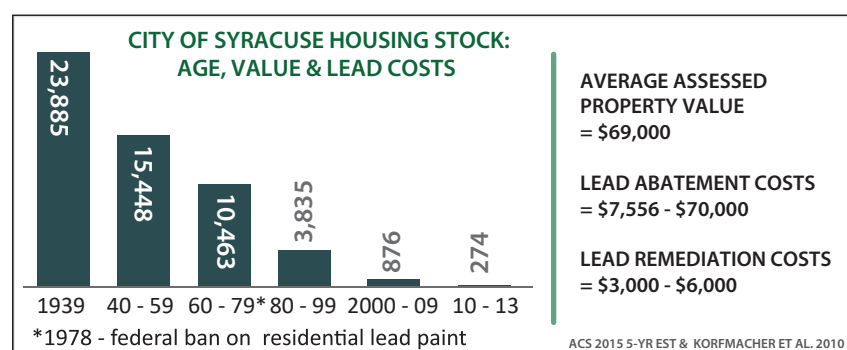
These action items for the built environment apply to any structure or environment that expose people to lead hazards. Nonetheless, the priority focus is the home environment.

STRATEGY: FUNDING FOR LEAD-SAFE INFRASTRUCTURE ACTIVITIES

ACTION ITEMS

- Identify and apply for lead funding for landlords and property owners
- Identify and promote opportunities for affordable, safe and healthy housing
- Support legislation that may provide assistance to property owners
- Identify philanthropic organizations to assist with lead remediation
- Create a database for lead safe and lead free units
- Build new homes

There is often little incentive for property owners to remediate lead based paint. Due to an aging housing stock, the remediation of lead can often be cost prohibitive. Subsequently, less permanent remediation methods are often used, such as paint stabilization and interim controls, in comparison to the costlier component replacement and abatement. This action plan strategy seeks to find funding opportunities to assist with remediating or removing lead hazards. Solutions could include a low interest loan or a partial loan/partial grant to both landlords and homeowners.



STRATEGY: OVERSIGHT OF RRP RULE IN NEW YORK STATE

The EPA's Renovation, Repair, & Painting (RRP) Rule is a law that mandates contractors to be certified in the use of lead-safe work practices. Instructed by EPA-approved providers, the certification process allows contractors and their staff to be properly trained to safely repair painted surfaces in pre-1978 buildings.


Owner occupied properties are frequently overlooked by state and local lead related laws, and are also not a priority for housing code enforcement processes. The RRP rule is, therefore, significant because it is applicable to both owner occupied and rental properties when renovation work disturbs painted surfaces.

When the RRP Rule was passed in 2010, it was expected that states would adopt the law and provide oversight. Currently, 39 states and two tribes have programs. New York State does not provide oversight.

ACTION ITEMS

- Identify how to better enforce the RRP Rule in NYS with local and state partners
- Provide training opportunities to contractors and their employees
- Identify funding for landlords and property managers to receive RRP training

Lead prevention programs, coalitions and professionals have started to discuss the RRP Rule and are interested in engaging New York State to develop a statewide oversight program.

| | | |
|--|---|---|
|  | RENOVATION, REPAIR & PAINTING: MANDATES LEAD-SAFE WORK PRACTICES | STEPS: 1: LEAD-PAINT? 2: SET-UP SAFELY 3: PROTECT YOURSELF 4: MINIMIZE DUST 5: CLEAN WORK AREA 6: CONTROL WASTE 7: VERIFY CLEAN & CLEAR |
|--|---|---|

STRATEGY: RENTERS' RIGHTS & LEAD SAFETY

ACTION ITEMS

- Identify resources for renters on renter rights
- Identify strategies to increase compliance with HUD/EPA Disclosure
- Identify resources for renters to keep a lead safe home
- Engage lawyers and judges on tenant rights

In many respects, remediating lead hazards may be beyond the control of renters, particularly those living in substandard housing. Nevertheless, renters maintain the right to reside in a safe living space. Disenfranchised renters are often unaware of their rights and the steps to maintain a lead safe home.

Continual engagement and education can provide renters with information on how to protect their rights, appropriately notify their landlord of defects in the home, identify if the property owner is following lead safe practices when maintaining or repairing their home and how to contact appropriate enforcement agencies if their landlord is unresponsive to notices, or outstanding code violations.

Additionally, there are several organizations, agencies and professionals involved with renters' rights and preventing lead poisoning. Examples include: tenant's right organizations, social services agencies, New American agencies, lead prevention organizations, the City of Syracuse's Housing Vulnerable Task Force, lawyers, housing assistance programs and judges.

STRATEGY: CROSS PROGRAM COORDINATION

In addition to data gathering and sharing, cross-program coordination is a key strategy to provide clients with the appropriate resources to prevent and reduce lead hazards.

During public meetings, Home HeadQuarters' GHHI Greater Syracuse and community partners identified opportunities to improve cross-program coordination. The process is designed to identify and address major gaps in service.

Cross-program coordination unites previously siloed programs to establish a link between housing and indoor environmental health services including funding, case management and resources. Privacy concerns can prevent cross-program coordination and the sharing of information. Therefore, agencies may need to execute a memorandum of understanding (MOU) to allow agency staff to partner with other organizations for the benefit of their clients.

ACTION ITEMS

- Identify where cross program coordination is needed
- Create a working group to coordinate services
- If necessary, create an MOU for coordination of services and resources

STRATEGY: EMPOWER THE PUBLIC ON LEAD SAFETY & PREVENTION

ACTION ITEMS

- Apply for funding for classes on lead safety
- Identify and promote affordable EPA RRP training vendors
- Identify existing resources and case workers to assist with lead prevention education
- Cross train case workers on lead prevention

As well as comprehensive lead remediation funding, a focus is also needed on the ongoing maintenance of homes and the ability to create a lead safe home. By increasing awareness and empowerment, tenants, property owners, maintenance staff and property managers can establish habits that limit exposure to lead hazards. To achieve this goal, partners will need to identify resources to provide classes to educate the public on how to keep and maintain a lead safe home.

Furthermore, organizations that work directly with community members can provide services, such as translators or legal services, to assist with the effectiveness of outreach, education and support for the process of lead remediation. Organizations can also help to build trust with the populations that they serve. Case workers, for example, often have direct involvement and engagement with residents, as well as access to homes with lead hazards. These caseworkers can help to identify resources for their clients.

CASE EXAMPLE

HEALTHY HOMES CLASSES

Home HeadQuarters & the NE Hawley Development Association (NEHDA) received funding to offer free classes to homeowners, landlords, property managers & renters on how to reduce exposure to indoor environmental toxins and decrease energy consumption.

GREEN & HEALTHY HOMES CLASSES : SNAPSHOT

94% WOULD RECOMMEND THE CLASS TO A FRIEND

89% REPORTED INCREASED KNOWLEDGE / ABILITY TO KEEP HEALTHY HOME WITH USE OF CLASS TIPS



FREE SUPPLIES:

60 SPRAY MOPS & REPLACEMENT MOP HEADS
9,000 BABY WIPES
60 ENERGY CONSERVATION KITS
250 HEALTHY HOME MAGNETS
250 REUSABLE TOTE BAGS
15 SPRAY BOTTLES

NOTE: THIS SNAPSHOT ONLY INCLUDES DATA FROM THREE CLASSES.

HEALTH & MEDICAL FIELD

The NYS public health law establishes several regulations, programs and actions that are often the responsibility of the health and medical field. At the local level, these laws provide several programs with the resources to assist with preventing and reducing lead poisoning, and addressing elevated blood lead levels. This section focuses on the health and medical field and its important role to reduce lead poisoning in our community.

STRATEGY: USE THE SOCIAL DETERMINANTS OF HEALTH MODEL TO ENGAGE HEALTH & MEDICAL PROFESSIONALS

Social Determinants of Health (SDOH) are the economic and social conditions in which people are born, grow, live, work, and age and their effect on a wide range of health risks and outcomes (CDC 2016). This means that our health is determined in part by five key areas: economic stability, education, social and community context, health and health care, and neighborhood and built environment. Using the Social Determinants of Health model, the public health field can create effective programs that work collaboratively across sectors to address the unique needs of their community.




Public health agencies and professionals have valuable expertise and resources to contribute to improving the built environment. Furthermore, their expertise and resources are valued and generally accepted by lawmakers and decision makers. These action items encourage the continued involvement by health agencies and professionals to improve health within the built environment.

ACTION ITEMS

- Continue to increase public health agencies and professionals' involvement in the development and support of adopting building standards and codes considered effective for the primary prevention of childhood lead poisoning
- Identify items to collaborate on programs, resources and future funding opportunities
- Facilitate ongoing communication between housing and health entities to further incorporate and strengthen recommended strategies to reduce lead poisoning

STRATEGY: STATE-FUNDED RESOURCES - THE CENTRAL / EASTERN NY REGIONAL LEAD POISONING RESOURCE CENTER & THE ONONDAGA COUNTY LEAD POISONING CONTROL PROGRAM

| ACTION ITEMS | |
|--|--|
| <ul style="list-style-type: none"> ● Continue to engage with Upstate Medical University and the Onondaga County Health Department ● Discuss activities that would promote primary prevention for pregnant women ● Continue to use GHHI Greater Syracuse to identify how the medical and health field can collaborate on preventing childhood lead poisoning in the built environment. ● Engage the medical and health field to provide research and data on lead poisoning and primary prevention. | <p>Located at the SUNY Upstate Medical University, the Central/ Eastern New York Regional Lead Poisoning Resource Center works to eliminate childhood lead poisoning. The resource center prioritizes education, medical management and primary prevention. As medical professionals, their experience and resources will provide a clinical component to the development of this action plan.</p> <p>The Onondaga County Health Department's (OCHD) Lead Poisoning Control Program (LPCP) monitors all childhood blood lead testing results for residents of Onondaga County. Established in 1972, the program aims to reduce the prevalence of childhood lead poisoning by identifying and correcting housing hazards, and by providing education resources, nursing and environmental case management services to children identified with EBLLs. An active participant of Home HeadQuarters' GHHI Greater Syracuse, the Lead Poisoning Control Program provided several resources to this action plan.</p> <p>These action items support the role of these programs and identify future opportunities for collaboration.</p> <div data-bbox="597 1087 1427 1247"> <div> LOCAL HEALTH RESOURCES:  ONONDAGA COUNTY LEAD POISONING CONTROL PROGRAM <small>ONONDAGA COUNTY HEALTH DEPT.</small> </div> <div> CENTRAL / EASTERN NEW YORK REGIONAL LEAD POISONING RESOURCE CENTER <small>SUNY UPSTATE MEDICAL UNIVERSITY</small> </div> </div> |

STRATEGY: INVOLVE MEDICAL INSURANCE COMPANIES WITH PRIMARY PREVENTION

Childhood lead poisoning is entirely preventable. As Katrina Korfmacher notes, lead is a “health problem with a feasible housing solution” (2008). Preventing lead poisoning, rather than treating the symptoms, requires control of the most significant cause of lead poisoning—lead based paint in housing units built before the 1978 federal ban (Gould 2009). In fact, investing in lead hazard control and remediation is often cited as economical, especially when considering the long term social and medical costs of childhood lead poisoning (Gould 2009).

Community partners need to identify and connect with medical insurance companies for grants to prevent lead poisoning. Primary prevention is a key strategy to reduce and maintain low levels of medical and other social costs.

| ACTION ITEMS |
|--|
| <ul style="list-style-type: none"> ● Identify and engage medical insurance companies to participate with primary prevention activities ● Research grant opportunities from medical insurance companies ● Research and explore Social Impact Bonds for lead poisoning prevention |

STRATEGY: MEDICAID FUNDING FOR PRIMARY PREVENTION

ACTION ITEMS

- Research current Medicaid programs that provide funding for primary prevention
- Identify and engage partners and NYS to assist with Medicaid involvement for primary prevention activities

Previous research indicates that Medicaid-eligible children represent approximately 60% of all US children with lead poisoning (Rhode Island Department of Health 2011). Each state administers its own Medicaid program and is granted flexibility to establish eligibility criteria, scope of services and provider payment rates. Because of this flexibility, state programs can vary widely, but are coordinated and overseen by the federal Center for Medicare and Medicaid Services (CMS) (Rhode Island Senate Fiscal Office 2014).

In 2016, Michigan's Medicaid approved federal and state funding that expanded lead abatement activities. Michigan will use approximately \$24 million per year for home repairs for five years.

These action items seek opportunities to explore Medicaid as a source of funding for primary prevention activities. Medicaid can be a key resource and an opportunity to reduce the medical, social and financial burden of lead poisoning in our community.

COMMUNITY AWARENESS, EDUCATION & OUTREACH

Community engagement, awareness and education will be an ongoing strategy for lead poisoning prevention. To ensure that solutions are suited for the community and for the populations most vulnerable to the health effects of lead poisoning, community partners need to engage in active discussion and collaboration.

STRATEGY: ENGAGE & EDUCATE THE MOST VULNERABLE POPULATIONS

The Greater Syracuse community identified several populations most exposed and vulnerable to lead hazards. These populations include pregnant women, children under six, people living in or regularly visiting buildings built before 1978, New Americans, people who are in poverty and renters. Education and outreach will need to take several forms to effectively communicate with diverse populations. Outreach will also be a continual

To develop outreach activities and engagement ask:

- What resources are available?
- What is the goal of this outreach?
- Who is the targeted audience?
- How will this activity access the audience?
- What is the primary message to the audience?
- What are the results of the outreach?
- How will this activity be measured?

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process since there are always new children under the age of six and new parents. Engagement activities will capitalize on available resources to use the best method for outreach.

STRATEGY: LEAD POISONING PREVENTION IS A SOCIAL & ENVIRONMENTAL JUSTICE ISSUE

Lead poisoning is the most prominent environmental hazard threatening children in the United States. It is also the most preventable (Environmental Health Coalition 2011). Despite the ability to eliminate hazards, lead poisoning remains a concern.

ACTION ITEMS

- Engage and partner with local environmental justice agencies, organizations and initiatives on primary prevention activities
- Continue to target neighborhoods with high EBLI prevalence rates
- Engage neighborhood partners to educate and advocate for residents

Some argue that lead poisoning prevention is a public health success. Yet, lead poisoning is also an example of social and environmental injustice. For example, lead poisoning is not contiguous. Instead, cases of EBLI are often clustered in specific neighborhoods. (Griffith et al. 1998; Gould 2009). Consequently, lead poisoning is often part of larger and more systemic inequalities that affect families. Examples include poverty, housing, education, the environment, and access to health care.

ENVIRONMENTAL JUSTICE



THE FAIR TREATMENT & MEANINGFUL ENGAGEMENT OF ALL PEOPLE REGARDLESS OF RACE, COLOR, NATIONAL ORIGIN, OR INCOME, WITH RESPECT TO THE DEVELOPMENT, AND ENFORCEMENT OF ENVIRONMENTAL LAWS, REGULATIONS AND POLICIES

ENVIRONMENTAL PROTECTION AGENCY 1994

To comprehensively prevent childhood lead poisoning, Home HeadQuarters' GHFI Greater Syracuse has worked to identify, coordinate and collaborate with a broad range of community members, advocates and organizations at the local, regional and national scale. Locally, the Greater Syracuse community has several partner organizations and initiatives that focus on related social justice activities. Examples include poverty, workforce development, early childhood development, environmental health, substandard housing conditions, access to housing, healthcare, education and employment. Outreach to these organizations will be an ongoing activity and will be dependent on the available resources, funding and opportunities.

STRATEGY: SAFE WORK PRACTICES FOR EMPLOYEES/WORKERS

Adults are exposed to lead by breathing in contaminated dust and fumes either at home, work or when engaging in hobbies that involve lead. For adults, lead poisoning may have a detrimental effect on the cardiovascular, central nervous, reproductive, hematologic and renal systems. Additionally, adults may take lead contaminants home in their clothes, shoes, skin, hair and hands and unintentionally expose their family.

Workers have a right to a safe and healthy workplace. Lead exposure for workers is often a result of production, use, maintenance, recycling and disposal of lead material and products. Several regulations aim to protect workers. For instance, if a workplace building, constructed before 1978, is to be renovated, employers must implement a lead safe program following the OSHA (Occupational Safety and Health Administration) Lead in Construction Standard guidelines (OSHA 2014). The 2010, EPA's RRP Rule also requires safe work practices when lead paint is disturbed by renovation activities. This rule not only aims to protect the inhabitants or users of a building, but also the contractors completing the renovations. Enforcement of the RRP rule and workforce education is a critical strategy to create a safe work environment. These action items are presented to protect both the worker and their family.

ACTION ITEMS

- Identify employees or workers who may be exposed to lead hazards
- Identify RRP training opportunities for employers and employees
- Educate employers and employees on the proper washing and cleaning techniques after exposure to lead hazards

STRATEGY: PARTNER WITH EARLY CHILDHOOD PROGRAMS & ORGANIZATIONS TO INFORM & EDUCATE THE POPULATIONS MOST VULNERABLE TO LEAD HAZARDS

ACTION ITEMS

- Collaborate with community partners to educate families, students and school personnel
- Refer children with lead exposure to their medical provider and if appropriate, refer to housing resources
- Develop school district procedures for children with EBLL, including items to address any developmental delays
- Encourage NYS approval for a proposed new law called “Granting schools access to a student’s blood lead test results” (Bill A03899/S03941)

Primary prevention is the main priority to effectively control and eliminate lead exposure. Nevertheless, as children are regrettably still poisoned by lead, tertiary prevention is also required. Tertiary prevention aims to decrease the impact and long-lasting effects of lead poisoning. Because lead poisoning most prominently affects children, organizations that serve the interests of children must be a part of the discussion to promote both primary prevention and tertiary prevention.

There are important steps that both early childhood programs and schools can take to contribute to primary prevention efforts. Early identification of lead exposure requires collaboration between community partnerships such as early childhood programs, schools, school nurses, parents, pediatric and family medicine providers, hospitals, public health officials and housing agencies.

These action items serve to engage early childhood programs and provide a roadmap for children who may be exposed to lead hazards.

CASE EXAMPLE

BILL A03899/S03941: GRANTING SCHOOLS ACCESS TO A STUDENT’S BLOOD LEAD TEST RESULTS

This proposed amendment would grant schools access to a student’s blood lead test results through the statewide immunization information system. The purpose of this amendment is to verify immunization status for admission eligibility and to identify individual student blood lead information for the provision of appropriate educational services.

With an aging and declining infrastructure, lead poisoning is a serious and pervasive concern for the Greater Syracuse community. In 2017, GHHI Greater Syracuse and its partners facilitated a series of meetings to develop a comprehensive and prioritized strategy to prevent lead poisoning. Organized into four focus areas, Policy and Enforcement, the Built Environment, the Health and Medical Field, and Community Awareness, Education and Outreach, each containing a series of strategies and action items, this action plan synthesizes those conversations.

The vision for the Lead Poisoning Prevention Action plan is to decrease lead hazards in the built environment and decrease the number of children with elevated blood lead levels in the Greater Syracuse area. This is an ambitious, but ultimately attainable goal.

Although initiated by GHHI Greater Syracuse and its partners, the implementation of this action plan requires broad community and stakeholder participation and engagement. From direct partners, such as the City of Syracuse and Onondaga County, to property owners and contractors, to EPA certified environmental health laboratories, to education, poverty, housing, justice, healthcare and social services, to neighborhood organizations, advocacy groups and community centers, to tenants and homeowners, the scale of necessary engagement is all-encompassing. Active involvement from all parties will propel the change this plan seeks to achieve.

To further ensure that the plan meets its objectives, the implementation and effectiveness of its strategies will require regular evaluation. GHHI Greater Syracuse and its partners will use the collective impact model to coordinate and assess plan implementation (Kania and Kramer 2011). The collective impact model identifies five conditions to achieve systematic change. Together these conditions ensure that participants have a shared vision for change, are accountable and motivated, are supported by appropriate management and leadership, and are involved in diverse but reinforcing activities. Using this model, GHHI Greater Syracuse and its partners will actively reflect on their ability to achieve systematic change at scale.

As with most formalized documents, the Lead Poisoning Prevention Action Plan captures a point in time. It represents specific policies, leadership, organizations, resources, data and activities. While these factors may change, GHHI Greater Syracuse and its partners maintain committed to preventing lead poisoning. To that end, this document, along with its strategies and action items will be dynamic and regularly updated to guide future planning, programs and decision-making. Above all else, the use of primary prevention strategies will remain the highest priority to effectively reduce and eliminate exposure to lead hazards.

Lead poisoning is preventable. Across the nation, communities are taking a stance against the unjust, life-altering and unnecessary poisoning of children by lead. GHHI Greater Syracuse and its partners present this action plan to formalize their commitment to prevent lead poisoning in the Greater Syracuse community. Underlying all activities and driving our success, is an obligation to protect families and to help them thrive in the knowledge that they live in safe and, ultimately, healthy homes.

COLLECTIVE IMPACT MODEL ASSESSMENT SURVEY

COMMON AGENDA:

For Collective impact efforts to be effective it is essential that all participants have a common agenda for change including a shared understanding of the problem and a joint approach to solving it through agreed upon actions.

CONTINUOUS COMMUNICATION

For Collective impact efforts to be effective it is essential that open and continuous communication occurs across the many players to build trust, assure mutual objectives and create common motivation.

MUTUALLY REINFORCING ACTIVITIES

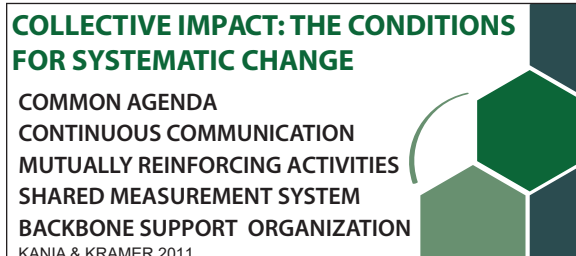
For Collective impact efforts to be effective it is essential that we have a plan of action that outlines and coordinates mutually reinforcing activities for each participant.

SHARED MEASUREMENT SYSTEMS

For Collective impact efforts to be effective it is essential that we are collecting data and measuring results consistently across all the participants to ensure shared measurement for alignment and accountability.

BACKBONE ORGANIZATION

For Collective impact efforts to be effective it is essential that we have a backbone organization(s) with staff and a specific set of skills to serve the entire initiative and coordinate participating organizations and agencies.



QUESTIONS:

- How active was your organization in the coalition this year?

Very Active | Somewhat active | Not Active

- How well do you feel your organization's mission aligns with the coalitions?

Not at all aligned | Somewhat aligned | Very aligned

- How would you rate the Coalition's performance in terms of internal communication among partners?

Very Ineffective | Somewhat Ineffective |

Somewhat effective | Very effective

- How would you rate the Coalition's performance in terms of external communication with the community?

Very Ineffective | Somewhat Ineffective |

Somewhat Effective | Very effective

How much do you agree with the following statements:

- The Coalition's action plan is clear and comprehensive

Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree

- The action plan targets marginalized and historically oppressed groups

Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree

- My organization has engaged in coordinated and mutually reinforcing activities with other member organizations of the coalition this year

Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree

- Is there a clear community impact measure that the coalition has selected that you are working toward moving in a positive direction?

Yes | No

- Are you sharing/ coordinating your organization's efforts to move this needle with other organizations in the coalition?

Yes | No

- Does your organization have data collection practices in place to track your programs' efforts?

Yes | No

- How well do you feel the Coalition's Collective impact effort is organized?

Not well organized | Neutral | Well organized

ONONDAGA COUNTY HEALTH DEPARTMENT EBLL FOLLOW-UP ACTIONS

| BLOOD LEAD LEVEL | FOLLOW-UP ACTIONS |
|------------------|--|
| <5 mcg/dL | <ul style="list-style-type: none"> • Test all children at age 1 and again at age 2 • Assess lead risk at every well child visit up to age 6, and test if child is found to be at high risk • Provide education on lead poisoning prevention and community resources |
| 5–9 mcg/dL | <p>A blood lead level of 5-9 mcg/dL may indicate exposure to lead</p> <ul style="list-style-type: none"> • Consider testing again within 3-6 months, especially if the child is < 2 years old or at high risk • Refer family to the Health Department to determine whether they are eligible for a free home lead inspection • Provide education on lead poisoning prevention and community resources |
| 10-14 mcg/dL | <p>The CDC defines lead poisoning as BLL \geq 10 mcg/dL</p> <ul style="list-style-type: none"> • If the test was a fingerstick, confirm with a venipuncture • Monitor venous blood lead levels • Refer family to Health Department for an environmental inspection • Provide risk reduction education and nutritional counseling |
| 15-44 mcg/dL | <p>All actions for BLLs 10-14 mcg/dL, plus:</p> <ul style="list-style-type: none"> • Inform family that the health department will provide case management services, including a visit by the Public Health Nurse and an environmental inspection • Collaborate with the health department on follow-up and case management of child • Provide a detailed lead exposure assessment, nutritional assessment including iron status, and developmental screening |
| 45-69 mcg/dL | <p>All actions for BLLs 15-44 mcg/dL, plus:</p> <ul style="list-style-type: none"> • Consult with Central/Eastern New York Regional Lead Resource Center for medical treatment and follow-up • Provide chelation treatment within 48 hours (child should not be discharged until a lead-safe environment is found) • Monitor post-chelation follow up including blood lead level monitoring in accordance with discharge instructions |
| >70 mcg/dL | <p>All actions for BLLs 45-69 mcg/dL, plus:</p> <ul style="list-style-type: none"> • Chelation treatment |

PUBLIC OUTREACH: HIGHLIGHTS FROM LEAD POISONING PREVENTION MEETINGS JANUARY 19 & MARCH 1

POLICY & ENFORCEMENT:

1. Enhance/Improve Rental registry

- Pass an ordinance that allows code enforcement officers to look for lead paint problems during routine interior and exterior inspections of rental units.
- Lessons from Rochester:
 - o Proactive inspections
 - o Without access to interiors, assess exterior and ticket windows with possible lead contamination
 - o Environmental Impact Statement is time consuming
 - o For system to work, create mechanism of enforcement before increase citations

2. Create/Develop a City of Syracuse Municipal Violations Bureau

- Provide a new way to work with landlords who don't comply with citations by creating an administrative process that increases efficiencies, revenue and decreases the current court case load.
- Currently noncompliant property owners go to court, which has a large case load

3. Review Onondaga County Sanitary Code to determine what actions can assist with Lead Prevention and Safety

- Review the Onondaga County Sanitary codes and identify ways it can enable healthy homes. If the language already exists, identify improvements to address and remediate lead hazards in the home.
- Review other sanitary codes in NYS that may already have language to address lead hazards and identify how they implement the code.
- Identify ways to work with landlords to comply with violations.

4. Systems Management with database, project management with various local agencies

- Through the inter-municipal working group discussions and activities, the Onondaga County Health Department can now enter non-compliant landlords into the city's database (creates a dynamic data source)
- Provides compliance history regarding property owners
- This information is now available to the public, residents and organizations. Access properties' lead information (ex: when properties have an open inspection) and identify trends for chronically non-compliant landlords

5. Partner with other Lead Coalitions/Programs throughout the state to improve state policies

- Granting schools access to a student's blood lead test results. Proposed: Bill A03899/S03941 Introduced by Sen. Hannon and Rep. Morelle
- Other possible initiatives:
 - o Improving State Codes
 - o Require landlords to be EPA RRP certified
 - o Require pregnant women be tested for lead positioning

Measurement: What policies are passed or improved? What enforcement activities are improved? How was the policy or enforcement implemented?

THE BUILT ENVIRONMENT:

1. Create a program with funding for lead safe activities in the home for rental and homeownership. There are very few funding opportunities for rental units.

- Primary issues are in rental units
- A program could be a low interest loan, a partial loan/partial grant (income eligible)
- Landlords don't have incentive to remediate lead. Costs can be \$25,000 when most of the violating homes are only valued at an average of \$88K
- For example: Syracuse Housing Authority (not Section 8)
 - o All new units are lead free
 - o Lead is abated during renovations of existing units.
 - o Average cost to renovate an existing unit and make it lead free is an approximate cost of \$58,000 per unit.
 - o Tenants sign lead disclosure when they move into public housing

2. Continue to provide and improve Renters Right Opportunities and education

- Primary issues are in rental units
- Educate Judges on the database, HUD lead disclosure rules and inform why rent is withheld
- Continue to provide Renters Rights classes/workshops
- Identify ways to continue and increase volunteer lawyers' involvement with renters who have non-compliant landlords.
- Withholding rent (DSS can and does hold rent, but renters may not want to)
 - o Withheld rent not always upheld in city court
 - People must prove they've held the rent or they'll be evicted, which will mean they'll have eviction records
 - People end up living in shelters for a period
 - Relocators are challenged to find safe and affordable homes to get families out of shelters
 - o Once there are eviction records it will be harder for people to live in better housing so they'll have to rent from bad landlords again
 - o A lot of tenants don't have representation at their hearings to explain what's happened

3. Continue to meet as the Inter-Municipal Working Group to address, inform and educate departments on open cases/violations

- Continue to discuss ways to improve access to data and coordinate with compliance of violations.
- Create a working group to address enforcement. The partners include Code Enforcement, Health Department, DSS (rental and childcare facilities), volunteer lawyers, need to follow the child, but also resolve the housing or building violation
 - o Need to find an enforcement method where landlords comply as the path to least resistance.
 - o Lessons from Rochester: There was no increase in homelessness, but need enforcement for landlords to change.

4. Identify funding opportunities that assist with addressing lead hazards and prevention:

- Training for homeowners, renters, landlords, property managers, employees exposed to lead hazards, contractors on lead safe and lead-free activities

5. Other steps:

- Get Child and Family Services from State Offices involved with this effort

- Get Trauma Task Force involved
- DSS's Daycare
- Is there a way to improve the purpose of the Disclosure rule?
- Safe house

Measurement: How many homes are lead free? How many homes are lead safe (with a limited time as considered lead safe)? What programs were developed and delivered? What type of funding programs implemented? What rental resources delivered? What training opportunities were delivered?

HEALTH & MEDICAL FIELD:

1. Partner with Regional Lead Resource Center at Upstate

2. Identify ways State Health Laws can be enforced

- For example, Blood Lead level testing at age 1 and 2

3. Identify ways to increase lead testing

- Increase lead testing opportunities at doctors' office
 - o At Head Start, many of the families aren't having their blood drawn at the doctor's office. If doctors give scripts to have the kids tested, families are much less likely to get tested, which means the kids aren't having their blood lead levels checked.
- Start testing women when they first find out they're pregnant
 - o Upstate tests many pregnant women, but not a widespread practice among hospitals
 - o There's a lack of awareness about how easily lead spreads from the mother to the fetus

4. Identify ways to get insurance involved with lead prevention.

5. Identify opportunities to utilize Affordable Care Act and Medicaid funding for addressing lead hazards with primary prevention.

6. Engage additional Health and Medical professionals and organizations. This includes:

- CNY Care Collaborative
- Case workers
- Community health workers
- Healthy neighborhood program
- Public health nurses
- Community foundations (local and regional)
- NYS Department of health
- Other medical and health professionals

Measurement: What collaborations are created with health and the built environment? What actions were taken to improve blood testing? What common goals are identified with the Regional Lead Resource Center?

COMMUNITY AWARENESS, EDUCATION & OUTREACH:

1. Community Awareness and Education to most vulnerable populations is an ongoing effort and need to be included with all strategies identified and address the following questions

- Who is the targeted audience?
- What is the message to the audience?
- How to get the audience involve? Do they come to you or do you go to them?

- What is the goal of this outreach technique?

2. As a social justice and an environmental justice issues, utilize partners that address social inequalities as a part of their mission.

- HOPE initiative
- Renters and Homeowners
- Refugee community
- Others

3. Partner with educational organizations and resources to inform and educate the people most vulnerable to lead hazards.

- School Districts
- Head Start, Daycare providers
- Initiatives: Literacy Coalition and ECA
- DSS daycare division
- Office of Child and Family Services
- Others

4. Provide opportunities for employees/workers to have safe work practices (moved to Built environment)

- Identify training opportunities workers who are exposed to lead hazards.
- SUNY Upstate hospital has a specialty center focused on workers in toxic environments, like lead remediation contractors

Measurement: What audiences were you able to reach out to with the strategies addressed? What additional partners were included with the identified strategies and implementation? How many people were informed, educated and/or made aware of this lead action plan/list of strategies?

Lead Discussion

March 1, 2017 at 9am-11am

| Name | Organization |
|-----------------------|---------------------------------------|
| Helen Hudson | city of syracuse/unite |
| Michael Collins | Syr. Northeast Community Center |
| Mary Carmody | Litany Coalition of Onondaga County |
| Bonnie O'Shea | Volunteer Lawyers Project |
| Jeremy Bullock | New York Homes and Community Renewal |
| Melissa Hall | PEACE INC |
| Rashika Jaipuar | PEACE INC |
| Crystal Coxen | Home Head Quarters |
| Erika Opgenorth | Home Head Quarters |
| Tony Mueller | Onondaga County Community Development |
| Greg Siwinski | SUNY-UMH - Occ Health Ctr |
| David Sonnenfeld | SUNY-ESF |
| Jonathan Luke Lorian | CENTROSTATS CEO |
| Sarah Merrick | Onondaga County - DSS-ES |
| Frank Ridzi | CNYCF |
| J. Omar Sharif | Code Enforcement |
| Katelyn Wright | Land Bank |
| Joe Dishaw | Syracuse Codes |
| Bill Simmons | S H A |
| Mary Margaret O'Brien | NBD City of Syracuse |
| Pat Cyl | Syracuse Codes |
| Stephanie Pasquale | |
| Corey Driscoll | Attorney General NYS |
| Indy Cyl | Onondaga County Health Dept |
| Sally Santangelo | CNY Fair Housing |
| Sharon Sherman | Greater Syr. Transit Network |
| Katie Brunson | Home Head Quarters |
| Emilee Barnett | Home Head Quarters |
| Peter Dunn | CNY Community Foundation |

Lead Discussion

March 1, 2017 at 9am-11am

| Name | Organization |
|------------------|--------------------------------------|
| Maureen Butler | Upstate Lead Resource Center |
| Harold Wiering | Upstate / Rensselaer Resource Center |
| Laurie Sheltra | NYS DOH - CNY Regional Office |
| Cheryl Geiler | " " |
| Peter Knobloch | ACTS |
| Gwen Chaffin | SUN |
| Jani Hatel | PEACE HS/EHS |
| Peggy Liuzzi | ECA |
| Daniella Hunter | CNYCF |
| Debra Lefferts | OC&D |
| David Taccare | SHA |
| JULIETTE CRAIG | HHQ |
| Samuel Perry | SYR Codes |
| Marwah Abbarali | Interfaith Works of CNA |
| Nicole Fine | Circare |
| ADAM VAN HOOSE | City of Syracuse Code Env |
| Johanna Anderson | Home Headquarters, Inc. |

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